

Title (en)

PROCESS FOR PROVIDING A THIN CORROSION INHIBITING COATING ON A METALLIC SURFACE

Title (de)

VERFAHREN ZUM VERSEHEN EINER METALLISCHEN OBERFLÄCHE MIT EINER DÜNNEN KORROSIONSINHIBIERENDEN BESCHICHTUNG

Title (fr)

PROCEDE DE FORMATION D'UN REVETEMENT ANTICORROSION MINCE SUR UNE SURFACE METALLIQUE

Publication

EP 1579030 B1 20100414 (EN)

Application

EP 03789349 A 20031218

Priority

- EP 0314577 W 20031218
- US 32892402 A 20021224

Abstract (en)

[origin: US2004118483A1] The invention relates to a process for coating metallic surfaces with a phosphating coating by contacting metallic surfaces at a temperature not above 45° C. and at a pH value less than 3.5 with an aqueous acidic alkali metal phosphating solution or dispersion containing: At least one compound of at least one phosphorus containing acid and/or at least one of their derivates like esters and salts in a total content of all kinds of acids and all their derivates like esters and salts together of less than 20 g/L calculated on mole base as orthophosphate, whereby the content of such phosphorus containing compounds/ions is at least 50% by weight in comparison to all such compounds/ions and at least one ion selected from the group consisting of at least one alkali metal ion and ammonium ion, whereby the phosphating coating has a coating composition with a phosphorus content of not more than 8 atomic % as measured by Secondary Neutral Mass Spectroscopy (SNMS) and whereby the phosphating coating has a coating weight in the range from 0.01 to 0.5 g/m².

IPC 8 full level

C23C 22/08 (2006.01); **C23C 22/10** (2006.01); **C23C 22/36** (2006.01); **C23C 22/73** (2006.01)

CPC (source: EP US)

C23C 22/08 (2013.01 - EP US); **C23C 22/10** (2013.01 - EP US); **C23C 22/36** (2013.01 - EP US); **C23C 22/73** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2004118483 A1 20040624; AT E464404 T1 20100415; AU 2003293945 A1 20040722; AU 2003293945 B2 20090122;
BR 0316881 A 20051025; CA 2511361 A1 20040715; CN 1754009 A 20060329; CN 1754009 B 20111019; DE 60332161 D1 20100527;
EP 1579030 A1 20050928; EP 1579030 B1 20100414; ES 2344345 T3 20100825; MX PA05006897 A 20050818; RU 2005123323 A 20060210;
RU 2358035 C2 20090610; WO 2004059034 A1 20040715; ZA 200505064 B 20080925

DOCDB simple family (application)

US 32892402 A 20021224; AT 03789349 T 20031218; AU 2003293945 A 20031218; BR 0316881 A 20031218; CA 2511361 A 20031218;
CN 200380109959 A 20031218; DE 60332161 T 20031218; EP 0314577 W 20031218; EP 03789349 A 20031218; ES 03789349 T 20031218;
MX PA05006897 A 20031218; RU 2005123323 A 20031218; ZA 200505064 A 20031218