

Title (en)

AQUEOUS SOLUTION AND METHOD FOR PHOSPHATIZING METALLIC SURFACES

Title (de)

WÄSSRIGE LÖSUNG UND VERFAHREN ZUR PHOSPHATIERUNG METALLISCHER OBERFLÄCHEN

Title (fr)

SOLUTION AQUEUSE ET PROCEDE POUR PHOSPHATER DES SURFACES METALLIQUES

Publication

**EP 1060290 A1 20001220 (DE)**

Application

**EP 99911702 A 19990224**

Priority

- DE 19808440 A 19980227
- EP 9901186 W 19990224

Abstract (en)

[origin: US6497771B1] An aqueous solution contains phosphate for producing layers of phosphate on metal surfaces selected from the group consisting of iron, steel, zinc, zinc alloys, aluminum and aluminum alloys. The solution contains 0.3 to 5 g Zn<sup>2+</sup>/l, 0.1 to 2 g nitroguanidine/l and 0.05 to 0.5 g hydroxylamine/l, with an S-value amounting to 0.03 to 0.3 and the ratio of the weight of Zn<sup>2+</sup> to P<sub>2</sub>O<sub>5</sub>=1:5 to 1.30.

IPC 1-7

**C23C 22/12**; **C23C 22/18**; **C23C 22/13**

IPC 8 full level

**C23C 22/12** (2006.01); **C23C 22/13** (2006.01); **C23C 22/18** (2006.01)

CPC (source: EP KR US)

**C23C 22/12** (2013.01 - EP US); **C23C 22/13** (2013.01 - EP KR US); **C23C 22/182** (2013.01 - EP US); **C23C 22/184** (2013.01 - KR); **C23C 22/186** (2013.01 - KR); **C23C 22/365** (2013.01 - EP KR US); **C23C 22/80** (2013.01 - KR); **C23C 22/82** (2013.01 - KR); **C23C 2222/20** (2013.01 - KR)

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**US 6497771 B1 20021224**; AT E224466 T1 20021015; AU 3029899 A 19990915; AU 740987 B2 20011122; BR 9909236 A 20001114; CA 2325012 A1 19990902; CN 1292041 A 20010418; DE 19808440 A1 19990909; DE 19808440 C2 20000824; DE 59902751 D1 20021024; EP 1060290 A1 20001220; EP 1060290 B1 20020918; JP 2002505378 A 20020219; KR 20010041417 A 20010515; PL 342623 A1 20010618; SI 20378 A 20010430; SK 12352000 A3 20010510; TR 200002495 T2 20001221; WO 9943868 A1 19990902

DOCDB simple family (application)

**US 62297501 A 20010109**; AT 99911702 T 19990224; AU 3029899 A 19990224; BR 9909236 A 19990224; CA 2325012 A 19990224; CN 99803391 A 19990224; DE 19808440 A 19980227; DE 59902751 T 19990224; EP 9901186 W 19990224; EP 99911702 A 19990224; JP 2000533606 A 19990224; KR 20007009551 A 20000828; PL 34262399 A 19990224; SI 9920018 A 19990224; SK 12352000 A 19990224; TR 200002495 T 19990224