

Title (en)

ELECTROLYTIC PHOSPHATING PROCESS AND COMPOSITE COATING FORMED ON STEEL SURFACE

Title (de)

ELEKTROLYTISCHER PHOSPHATIERUNGSPROZESS UND KOMPOSITBESCHICHTUNGEN, DIE AUF EINE STAHL OBERFLÄCHE AUFGEBRACHT SIND

Title (fr)

PROCEDE DE PHOSPHATATION ELECTROLYTIQUE ET REVETEMENT COMPOSITE FORME SUR UNE SURFACE D'ACIER

Publication

EP 1074640 A4 20060621 (EN)

Application

EP 99959898 A 19991217

Priority

- JP 9907124 W 19991217
- JP 35925498 A 19981217

Abstract (en)

[origin: EP1074640A1] The present invention provides a phosphate chemical treatment technology suitable for electrolytic treatment. The present invention discloses a phosphate chemical treatment bath containing at least phosphate ions and phosphoric acid, nitrate ions, metal ions that form a complex with phosphate ions in the phosphate chemical treatment bath, and metal ions for which the electrical potential, at which the ions of the metal dissolved in the phosphate chemical treatment bath are reduced and precipitate as metal, is equal to or greater than the anodic electrolytic reaction potential of water as the solvent; the concentration of metal ions other than those which are a component of the film in the treatment bath being 0-400 ppm, and the treatment bath being substantially free of solids that have an effect on the film formation reaction. <IMAGE>

IPC 1-7

C25D 11/36

IPC 8 full level

C25D 11/36 (2006.01)

CPC (source: EP KR)

C25D 11/36 (2013.01 - EP KR)

Citation (search report)

- [X] US 5401381 A 19950328 - SEIDEL REINHARD [DE], et al
- See references of WO 0036191A1

Cited by

US7833404B2; EP1234896A1; EA012533B1; EP1161575A4; WO2006122651A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1074640 A1 20010207; EP 1074640 A4 20060621; BR 9907916 A 20020430; BR 9907916 B1 20110726; CA 2320865 A1 20000622; CA 2320865 C 20100316; CN 1221687 C 20051005; CN 1293720 A 20010502; KR 100400522 B1 20031010; KR 20010040816 A 20010515; WO 0036191 A1 20000622

DOCDB simple family (application)

EP 99959898 A 19991217; BR 9907916 A 19991217; CA 2320865 A 19991217; CN 99804171 A 19991217; JP 9907124 W 19991217; KR 20007008710 A 20000809