

Title (en)

METHOD FOR PHOSPHATIZING METAL SURFACES WITH IMPROVED PHOSPHATE RECOVERY

Title (de)

VERFAHREN ZUR PHOSPHATIERUNG VON METALLOBERFLÄCHEN MIT VERBESSERTER PHOSPHAT-RÜCKGEWINNUNG

Title (fr)

PROCEDE DE PHOSPHATATION DE SURFACES METALLIQUES PRESENTANT UN MEILLEUR TAUX DE RECUPERATION DE PHOSPHATE

Publication

EP 1567689 A1 20050831 (DE)

Application

EP 03795846 A 20031126

Priority

- DE 10256884 A 20021205
- EP 0313284 W 20031126

Abstract (en)

[origin: WO2004050949A1] The novel method for phosphatizing metal surfaces is characterized by guiding a wash fluid after phosphation into a cleaning solution or recovering a wash liquid before phosphation. At least a part of said wash liquid is removed, mixed with a precipitant for heavy metal cations and the solution is subjected to filtration, preferably membrane filtration. Cleansing anions, especially phosphate ions, are recovered from the substantially heavy metal-free filtration permeate via anion exchange, reverse osmosis or precipitation and are optionally reused.

IPC 1-7

C23C 22/86; C02F 1/62; C02F 103/16; C23G 1/36; C01B 25/45; C23C 22/73

IPC 8 full level

C02F 9/00 (2006.01); **C23C 22/73** (2006.01); **C23C 22/86** (2006.01); **C23G 1/36** (2006.01); **C02F 1/28** (2006.01); **C02F 1/42** (2006.01); **C02F 1/44** (2006.01); **C02F 1/52** (2006.01); **C02F 1/54** (2006.01); **C02F 1/72** (2006.01)

CPC (source: EP)

C02F 9/00 (2013.01); **C23C 22/73** (2013.01); **C23C 22/86** (2013.01); **C23G 1/36** (2013.01); **C02F 1/281** (2013.01); **C02F 1/42** (2013.01); **C02F 1/44** (2013.01); **C02F 1/444** (2013.01); **C02F 1/52** (2013.01); **C02F 1/5236** (2013.01); **C02F 1/72** (2013.01); **C02F 2001/422** (2013.01); **C02F 2101/105** (2013.01); **C02F 2101/20** (2013.01); **C02F 2103/16** (2013.01)

Citation (search report)

See references of WO 2004050949A1

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)

WO 2004050949 A1 20040617; AU 2003298143 A1 20040623; DE 10256884 A1 20040617; EP 1567689 A1 20050831; RU 2005121129 A 20060120

DOCDB simple family (application)

EP 0313284 W 20031126; AU 2003298143 A 20031126; DE 10256884 A 20021205; EP 03795846 A 20031126; RU 2005121129 A 20031126