

Title (en)

PROCESS FOR PRODUCING PHOSPHATE COATINGS

Publication

EP 0264811 B1 19910626 (DE)

Application

EP 87115011 A 19871014

Priority

JP 24608886 A 19861016

Abstract (en)

[origin: EP0264811A1] Phosphate coatings are produced on surfaces of cold-rolled steel or steel galvanised on one or both sides by using, to produce coatings rich in phosphophyllite, a phosphating solution which contains 10 to 20 g/l of phosphate (calculated as PO₄) 1.5 to 2.5 g/l of zinc (calculated as Zn) 5 to 15 g/l of nitrate (calculated as NO₃) 0.5 to 1.5 g/l of fluoride (calculated as F) 0.5 to 1.5 g/l of nickel (calculated as Ni) 2 to 20 mg/l of iron(III) (calculated as Fe) and 160 to 300 mg/l of nitrite (calculated as NO₂) at a temperature in the range from 15 to 39 DEG C, preferably 20 to 30 DEG C. In this phosphating solution, the Zn:PO₄ weight ratio is adjusted to (0.08 to 0.21):1 and the free acid content (FA) is adjusted to a value fixed by the lower limit curve FA = 0.2 x Zn - 0.4 and the upper limit curve FA = 0.4 x Zn - 0.5.

IPC 1-7

C23C 22/36

IPC 8 full level

C23C 22/36 (2006.01)

CPC (source: EP)

C23C 22/362 (2013.01); **C23C 22/364** (2013.01)

Citation (examination)

- DE 3239088 A1 19840426 - KLUTHE GMBH CHEM WERKE [DE]
- JP H06169974 A 19940621 - TERUMO CORP

Cited by

EP0381190A1; EP0759096A4; US5795407A; EP0370535A1; GB2226829B; WO9504842A1

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