

Title (en)

SUBSTANTIALLY NICKEL-FREE PHOSPHATE CONVERSION COATING COMPOSITION AND PROCESS

Title (de)

IM WESENTLICHEN NICKELFREIER PHOSPHATKONVERSIONSÜBERZUG-ZUSAMMENSETZUNG UND VERFAHREN

Title (fr)

COMPOSITION ET PROCEDE DE REVETEMENT DE CONVERSION DE PHOSPHATE PRATIQUEMENT SANS NICKEL

Publication

**EP 0675972 B1 19990811 (EN)**

Application

**EP 94904428 A 19931215**

Priority

- US 99546592 A 19921222
- US 9312044 W 19931215

Abstract (en)

[origin: WO9414999A1] The nickel in conventional low zinc and nickel containing phosphate conversion coating compositions can be replaced by substantially smaller concentrations of cupric ions without losing the benefits of quality that motivated the addition of nickel to low zinc phosphating compositions originally; in fact, better alkaline resistance and paint adhesion can be achieved, along with a substantial cost reduction.

IPC 1-7

**C23C 22/12**; **C23C 22/18**; **C23C 22/36**

IPC 8 full level

**C23C 22/12** (2006.01); **C23C 22/13** (2006.01); **C23C 22/18** (2006.01); **C23C 22/36** (2006.01)

CPC (source: EP)

**C23C 22/12** (2013.01); **C23C 22/13** (2013.01); **C23C 22/186** (2013.01); **C23C 22/362** (2013.01); **C23C 22/368** (2013.01)

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