

Title (en)  
ALKALINE RESISTANT PHOSPHATE CONVERSION COATINGS AND METHOD OF MAKING

Publication  
**EP 0112826 B1 19881228 (EN)**

Application  
**EP 82902566 A 19820712**

Priority  
US 8200949 W 19820712

Abstract (en)  
[origin: WO8400386A1] A method for increasing the resistance to alkaline dissolution of a phosphate conversion coating on a corrodible metal substrate. The substrate is exposed to the phosphating solution by spraying or dipping to chemically effect a reaction with the substrate. The solution contains 84-94 molar percent of the total metal cations of a first layer-forming divalent metal cation, the metal cation having a hydroxide which has a lower solubility in an alkaline solution than iron or zinc hydroxide and is preferably selected from the group consisting of nickel, cobalt, magnesium and lanthanides, and a second layer-forming metal cation in the form of zinc present in an amount of .2-.6 g/l as a Zn<+2>. The molar ratio range of the first and second metal cations is in the range of 5.2:1 to 16:1, and the first metal cation is present in the solution in an amount of at least 1.0 g/l. The deposited coating has a first divalent metal cation present in an amount of at least 15 mole percent of the total divalent cations, and a second divalent cation present in an amount of at least 25 % by weight of the coating; the coating preferably has a uniform weight of less than 1.3 g/m<2> (120 mg/ft<2>).

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

IPC 8 full level  
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