

Title (en)  
Multiple step conversion coating process

Title (de)  
Mehrstufenverfahren zur Konversionsbeschichtung

Title (fr)  
Procédé de couche de conversion à plusieurs étapes

Publication  
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Application  
**EP 04028997 A 20041207**

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US 74553903 A 20031229

Abstract (en)  
A process for the chemical pretreatment, before an organic coating, of composite metal structures that contain aluminum or aluminum alloy portions together with zinc or zinc alloy portions, and steel, galvanized steel and/or alloy-galvanized steel portions, such that the phosphate level and the operating temperature of the zinc phosphate solution is reduced, and the nitrite accelerator level of the solution is increased. The process of the present invention reduces the sludge produced by the process, the temperature at which the process operates, and the need for monitoring the process. Furthermore, the pretreatment process of the present invention forms a conversion layer on all exposed metal surfaces that is suitable as a corrosion-preventing paint substrate, especially before a cathodic electro-dipcoating.

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**C23C 22/365** (2013.01 - EP US); **C23C 22/73** (2013.01 - EP US); **C23C 22/83** (2013.01 - EP US)

Citation (applicant)  
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