

Title (en)  
CHROMIUM-FREE ANTICORROSIVE AND ANTICORROSIVE METHOD

Title (de)  
CHROMFREIES KORROSIONSSCHUTZMITTEL UND KORROSIONSSCHUTZVERFAHREN

Title (fr)  
AGENT ANTICORROSIF DEPOURVU DE CHROME ET PROCEDE DE PROTECTION CONTRE LA CORROSION

Publication  
**EP 1187883 A1 20020320 (DE)**

Application  
**EP 00935006 A 20000511**

Priority  
• DE 19923084 A 19990520  
• EP 0004267 W 20000511

Abstract (en)  
[origin: DE19923084A1] Chromium-free corrosion protection agent contains 0.5-100 g/l hexafluoro anions of Ti (IV), Si (IV) or Zr (IV), 0-100 g/l phosphoric acid, 0-100 g/l one or more compounds of Co, Ni, V, Fe, Mn, Mo or W, 0.5-30 wt.% of a water-soluble or water-dispersible film-forming organic polymer or copolymer, 0.1-10 wt.% organophosphonic acid, and optional auxiliary aids and additives. An Independent claim is also included for a process for treatment of steel or aluminum comprising contacting the surface of the metal with the corrosion protecting agent for 0.5-60 seconds, removing the agent, and heating the substrate to the peak metal temperature of 50-150 deg C for 1-120 seconds, in which cross-linking of the polymer film and its anchoring to the metal surface simultaneously takes place.

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**C09D 5/08; C23C 22/34**

IPC 8 full level  
**C23C 22/36** (2006.01)

CPC (source: EP)  
**C09D 5/084** (2013.01); **C23C 22/361** (2013.01); **C23C 22/364** (2013.01); **C23C 22/365** (2013.01)

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