

Title (en)  
METHOD OF PHOSPHATING THE SURFACES OF METALS, AND ITS USE

Publication  
**EP 0039093 B1 19831116 (DE)**

Application  
**EP 81200286 A 19810313**

Priority  
DE 3016576 A 19800430

Abstract (en)  
[origin: EP0039093A1] Phosphate coatings are formed on metal surfaces e.g. sheet steel by use of a zinc phosphate composition having a low ratio Zn:P2O5 but containing relatively high contents of ClO3 and NO3. The process results in coatings having a fine grain and high wet corrosion resistance and which are particularly suitable for immersion electro-lacquering. Solutions contain (in g/l) 0.3-1.3 Zn, 10-26 P2O5, 0.1-3 Ni, 1-6 ClO3 and 5-25 NO3. The ratio of P2O5/Zn is in the range 9-85 and the ratio of Ni/Zn in the range 0-1.5. Solutions may also include sodium nitrite or nitrobenzene sulphonate, BF<->4 or SiF<2->6 and small amounts (e.g. up to 0.5 g/l) of other cations e.g. NH<+>4, Ca, Mn, Cu, Co.

IPC 1-7  
**C23F 7/10**; **C23F 7/08**

IPC 8 full level  
**C23C 22/14** (2006.01); **C23C 22/36** (2006.01)

CPC (source: EP)  
**C23C 22/14** (2013.01); **C23C 22/362** (2013.01)

Cited by  
EP0452638A1; EP0659906A1; US5536336A; US5904786A; CN1066207C; WO9617977A1

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