

Title (en)  
PROCESS FOR OBTAINING PHOSPHATE COATINGS

Publication  
**EP 0313114 B1 19910502 (DE)**

Application  
**EP 88201763 A 19880818**

Priority  
DE 3735538 A 19871021

Abstract (en)  
[origin: EP0313114A1] In a process for obtaining phosphate coatings on metal surfaces consisting at least partially of iron or steel by means of phosphating solutions, which contain layer-forming cations and are operated on the iron side, wherein the content of iron (II) ions is limited by oxidation with oxygen-containing gases and precipitation of iron phosphate, the oxidation is carried out, in order to accelerate the oxidation of the iron(II) ions, at a temperature of at most 50 DEG C in the presence of microorganisms which oxidise iron(II), especially of Thiobacillus species, such as the strain Thiobacillus ferrooxidans. It is particularly advantageous here to branch a part stream of the phosphating solution off from the phosphating vessel and to carry out the oxidation and iron phosphate separation in a zone divided off from the phosphating zone, in particular in a column provided with packing, charged with oxygen-containing gas from below and operated with upward flow.

IPC 1-7  
**C23C 22/10**; **C23C 22/73**

IPC 8 full level  
**C23C 22/07** (2006.01); **C23C 22/10** (2006.01); **C23C 22/73** (2006.01)

CPC (source: EP)  
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DE

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