

Title (en)  
NICKEL-FREE PHOSPHATIZATION PROCESS

Title (de)  
NICKELFREIE PHOSPHATIERVERFAHREN

Title (fr)  
PROCEDE DE PHOSPHATATION EXEMPT DE NICKEL

Publication  
**EP 0633950 B1 19960515 (DE)**

Application  
**EP 92924684 A 19921207**

Priority  
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Abstract (en)  
[origin: US6197126B1] The invention is a process for applying a nickel-free, copper-containing phosphate coating to a metal surface by contacting the metal surface with a phosphate solution containing 0.2 to 2.0 g/l zinc ions, 0.5 to 25 mg/l copper ions, and 5-30 g/l phosphate ions.

IPC 1-7  
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IPC 8 full level  
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Cited by  
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