

Title (en)  
NICKEL-FREE PHOSPHATIZATION PROCESS

Title (de)  
NICKELFREIES PHOSPHATIERVERFAHREN

Title (fr)  
PROCEDES DE PHOSPHATAGE SANS NICKEL

Publication  
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Application  
**EP 94925483 A 19940829**

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Abstract (en)  
[origin: US5792283A] PCT No. PCT/EP94/02848 Sec. 371 Date Mar. 6, 1996 Sec. 102(e) Date Mar. 6, 1996 PCT Filed Aug. 29, 1994 PCT Pub. No. WO95/07370 PCT Pub. Date Mar. 16, 1995A process for phosphating surfaces of steel, galvanized or alloy-galvanized steel, aluminum, aluminized or alloy-aluminized steel. The process is particularly useful for treating metal surfaces which are to be cathodic electrocoated. The process uses a nickel, cobalt, copper, nitrite and oxo-anion of halogen free phosphating solution containing 0.3 to 2.0 g/l Zn(II), 0.3 to 4 g/l Mn(II), 5 to 40 g/l phosphate ions and at least one of 0.5 to 5 g/l hydroxylamine and 0.2 to 2 g/l m-nitrobenzene sulfonate wherein the ratio by weight of Zn(II) to Mn(II) is not greater than 2.

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