

Title (en)
PROCESS FOR THE ELECTROLYTIC ZINC PLATING OF STEEL

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EP 0137540 A3 19870527 (DE)

Application
EP 84201280 A 19840907

Priority
DE 3335009 A 19830928

Abstract (en)
[origin: US4547269A] A process of electrodepositing zinc on steel wherein zinc-containing aqueous sulfuric acid electrolytes are used which contain one or more oxyacids of sulfur in which the sulfur has an oxidation number from +5 to +1. The phosphatizing of the resulting zinc coatings results in phosphate coatings which are virtually free of spots. Suitable oxyacids are sulfurous acid (H₂SO₃), sulfoxylic acid (H₂SO₂), hyposulfurous acid (H₂S₂O₄) and/or thiosulfuric acid (H₂S₂O₃) in the form of acids, salts and acid anhydrides. The oxyacids should be present in the electrolyte in a concentration of 0.05 to 10 g/l, preferably 0.1 to 2 g/l.

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C25D 3/22

IPC 8 full level
C25D 3/22 (2006.01); **C25D 5/26** (2006.01)

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Citation (search report)

- [A] US 1607869 A 19261123 - COLCORD FRANK F
- [A] US 1380142 A 19210531 - HANSON HUGO H, et al
- [A] US 3637475 A 19720125 - BERECZKY TIBERIU, et al
- [A] US 3850766 A 19741126 - KOSMOS J
- [X] THE ELECTROCHEMICAL SOCIETY, Band 80, 1941, Seiten 387-398; E.H. LYONS JR.: "Acid zinc plating"
- [X] H.W. DETTNER et al.: "Handbuch der Galvanotechnik", Band II, Seiten 293-294, Carl Hanser Verlag, München, DE;
- [A] METAL FINISHING ABSTRACTS, Band 24, Nr. 4, Juli/August 1982, Seite 242, Teddington, Middlesex, GB; & SU-A-905 335 (E.E. KRAVTSOV et al.)

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