

Title (en)
PROCESS FOR PHOSPHATIZING ZINC-ELECTROPLATED METAL OBJECTS

Publication
EP 0111246 A3 19860108 (DE)

Application
EP 83112008 A 19831130

Priority
DE 3245411 A 19821208

Abstract (en)
[origin: ES8406564A1] A process for phosphating zinc-plated metal articles, particularly electrolytically zinc-plated steel sheets, by treatment thereof for a short period with an acidic phosphating solution which, in addition to zinc and phosphate ions, can contain other metal cations and/or anions of oxygen-containing acids having an accelerating effect, wherein the phosphating solution has a content of Zn²⁺-cations of between about 1 and 2.5 g/l, a free acid content in the range from 0.8 to 3 points, and the acid ratio of total acid to free acid in the range from 5 to 10. The phosphating treatment is carried out for a period of time not in excess of about 5 seconds.

IPC 1-7
C23C 22/12; **C23C 22/13**

IPC 8 full level
C23C 22/12 (2006.01); **C23C 22/13** (2006.01)

CPC (source: EP KR US)
C23C 22/12 (2013.01 - EP KR US); **C23C 22/13** (2013.01 - EP US)

Citation (search report)

- [Y] DE 1049659 B
- [Y] FR 1366777 A 19640717 - PARKER STE CONTINENTALE
- [A] FR 2033717 A5 19701204 - PARKER STE CONTINENTALE

Cited by
EP0359296A1; EP0258922A1; EP0219779A3; EP0370535A1; GB2204067A; GB2204067B; EP0175606A1; FR2569203A1; US6461450B1; WO9102829A3; WO9945171A1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
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