

Title (en)

CORROSION INHIBITION OF METALS IN WATER SYSTEMS USING ORGANIC PHOSPHOROUS DERIVATIVES CONTAINING CARBOXYL GROUPS

Publication

**EP 0283191 A3 19890315 (EN)**

Application

**EP 88301999 A 19880308**

Priority

US 2771487 A 19870319

Abstract (en)

[origin: EP0283191A2] The inhibition of metal corrosion in water systems by an organic phosphonocarboxylic and/or phosphinocarboxylic acid compound is improved by using in combination therewith a manganese compound capable of providing a manganese ion. The manganese may be in the chelated form with the phosphono- or phosphinocarboxylic compound.

IPC 1-7

**C23F 11/18**; **C02F 5/14**

IPC 8 full level

**C23F 11/167** (2006.01); **C23F 11/08** (2006.01); **C23F 11/18** (2006.01)

CPC (source: EP KR)

**C23F 11/08** (2013.01 - EP KR); **C23F 11/167** (2013.01 - KR); **C23F 11/18** (2013.01 - KR)

Citation (search report)

- [YD] US 4606890 A 19860819 - FISK PETER R [GB]
- [Y] EP 0009080 A1 19800402 - CIBA GEIGY AG [CH]
- [A] US 3717701 A 19730220 - CARLSON R
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- [A] FR 2391961 A1 19781222 - BAYER AG [DE]

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Designated contracting state (EPC)

BE DE FR GB IT NL SE

DOCDB simple family (publication)

**EP 0283191 A2 19880921**; **EP 0283191 A3 19890315**; AU 1321288 A 19880922; DK 141388 A 19880920; DK 141388 D0 19880315; FI 881163 A0 19880311; FI 881163 A 19880920; JP S63259086 A 19881026; KR 880011376 A 19881028; NO 881091 D0 19880311; NO 881091 L 19880920; ZA 881767 B 19891129

DOCDB simple family (application)

**EP 88301999 A 19880308**; AU 1321288 A 19880317; DK 141388 A 19880315; FI 881163 A 19880311; JP 6558688 A 19880318; KR 880002927 A 19880319; NO 881091 A 19880311; ZA 881767 A 19880311