

Title (en)

Means for manufacturing corrosion protection coats on metal surfaces

Title (de)

Mittel zur Herstellung von Korrosionsschutzschichten auf Metalloberflächen

Title (fr)

Moyen de fabrication de couche anti-corrosion sur des surfaces métalliques

Publication

**EP 1978131 B2 20190306 (DE)**

Application

**EP 07105237 A 20070329**

Priority

EP 07105237 A 20070329

Abstract (en)

[origin: EP1978131A1] Production of an agent for producing anticorrosion layers on metal surfaces comprises forming an aqueous solution containing oxo-cations and halogen complex anions and forming nano-particles with an average particle diameter of less than 500 nm in the solution in-situ by physical and/or chemical treatment of the solution. The treatment comprises changing the temperature, changing the ion concentration, changing the pH value, changing the pressure, saturating the solution, stirring the solution, adding an oxidant and/or adding a reducing agent.

IPC 8 full level

**C23C 22/34** (2006.01)

CPC (source: EP KR US)

**C23C 22/34** (2013.01 - EP KR US); **C23F 11/04** (2013.01 - KR); **C23F 11/06** (2013.01 - KR)

Citation (opposition)

Opponent :

- US 2003205299 A1 20031106 - GREENE JEFFREY ALLEN [US], et al
- US 5743971 A 19980428 - INOUE MANABU [JP], et al
- EP 1950325 A2 20080730 - NIHON HYOMEN KAGAKU KABUSHIKI [JP]

Cited by

EP2100986A1; CN103205739A; US10400337B2; US10125424B2; US10920324B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 1978131 A1 20081008; EP 1978131 B1 20120606; EP 1978131 B2 20190306**; BR PI0809299 A2 20141014; CN 101668881 A 20100310; CN 101668881 B 20110824; ES 2388302 T3 20121011; ES 2388302 T5 20191018; JP 2010532816 A 20101014; JP 5279811 B2 20130904; KR 101493458 B1 20150213; KR 20100014685 A 20100210; US 2010126633 A1 20100527; US 8764916 B2 20140701; WO 2008119675 A1 20081009

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