

Title (en)

METHOD FOR PRODUCING DEFORMABLE CORROSION PROTECTION LAYERS ON METAL SURFACES

Title (de)

VERFAHREN ZUR AUSBILDUNG VERFORMBARER KORROSIONSSCHUTZSCHICHTEN AUF METALLISCHEN OBERFLÄCHEN

Title (fr)

PROCÉDÉ PERMETTANT DE CONSTITUER DES COUCHES ANTICORROSION DÉFORMABLES SUR DES SURFACES MÉTALLIQUES

Publication

EP 2337877 A1 20110629 (DE)

Application

EP 09744042 A 20090917

Priority

- DE 2009075049 W 20090917
- DE 102008051883 A 20081016

Abstract (en)

[origin: WO2010043220A1] The invention relates to a method for producing deformable corrosion protection layers on a metal surface and to the use of the method. In order to create an economical method for the cathodic corrosion protection of metal for a broader range of applications, within the scope of the invention a method for producing deformable corrosion protection layers on a metal surface is proposed, comprising the following steps: a) mixing 5 to 95% by weight metal magnesium, zinc, aluminum or titanium particles, or mixtures or alloys comprising at least one of said metals, in the form of pigments, powders, pastes (flakes) or granules, with 5 to 95% by weight of at least one metal compound, wherein a reaction between the metal particles and metal compound(s) results in surface-modified metal particles, b) applying the resulting surface-modified metal particles onto the metal surface, c) compacting the layer produced from the surface-modified metal particles at temperatures between room temperature and 500°C. Within the context of the invention it has been shown that the coatings according to the invention can be deformed and that the metal substrate coated using the method according to the invention can be deformed, varnished, welded, coated, and dyed and reflects heat.

IPC 8 full level

C23C 26/00 (2006.01); **C09D 7/45** (2018.01); **C23C 20/00** (2006.01)

CPC (source: EP KR US)

C09D 5/10 (2013.01 - EP US); **C23C 20/00** (2013.01 - KR); **C23C 22/02** (2013.01 - EP US); **C23C 22/74** (2013.01 - EP US); **C23C 26/00** (2013.01 - EP KR US); **C23F 13/06** (2013.01 - EP US); **C23F 13/10** (2013.01 - EP US); **C23C 2222/10** (2013.01 - EP US)

Citation (search report)

See references of WO 2010043220A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

DE 102008051883 A1 20100422; BR PI0919607 A2 20151208; CN 102395707 A 20120328; EP 2337877 A1 20110629; JP 2012505963 A 20120308; KR 20110073519 A 20110629; US 2012009340 A1 20120112; WO 2010043220 A1 20100422

DOCDB simple family (application)

DE 102008051883 A 20081016; BR PI0919607 A 20090917; CN 200980141217 A 20090917; DE 2009075049 W 20090917; EP 09744042 A 20090917; JP 2011531353 A 20090917; KR 20117008611 A 20090917; US 99840509 A 20090917