Title (en)

METHOD FOR COATING METAL SURFACES USING AN AQUEOUS COMPOUND HAVING POLYMERS, THE AQUEOUS COMPOUND, AND USE OF THE COATED SUBSTRATES

Title (de)

VERFAHREN ZUR BESCHICHTUNG VON METALLISCHEN OBERFLÄCHEN MIT EINER WÄSSERIGEN, POLYMERE ENTHALTENDEN ZUSAMMENSETZUNG, DIE WÄSSERIGE ZUSAMMENSETZUNG UND VERWENDUNG DER BESCHICHTETEN SUBSTRATE

Title (fr)

PROCÉDÉ POUR LE REVÊTEMENT DE SURFACES MÉTALLIQUES PAR UNE COMPOSITION AQUEUSE CONTENANT DES POLYMÈRES, COMPOSITION AQUEUSE ET UTILISATION DE SUPPORTS AINSI REVÊTUS

Publication

EP 2131964 A1 20091216 (DE)

Application

EP 08717366 A 20080304

Priority

- EP 2008052603 W 20080304
- DE 102007011553 A 20070309

Abstract (en)

[origin: CA2680242A1] The invention relates to a method for coating a metal surface using an aq ueous composition, wherein in addition to water the composition also compris es a) an organic film former as the main component, wherein 70 to 100 wt.% o f the content of synthetic resin(s) in the organic film former is formed by at least one water soluble or/and water dispersed synthetic resin in the for m of polymers, copolymers, block copolymers, or/and graft copolymers based s ynthetic resins, selected from the group consisting of polycarbonate, polyur ethane, ionomer, poly(meth)acrylate, polyester, polyether, or/and polystyren e, wherein the polycarbonate and polyurethane content is at least 10 wt.-% e ach, b) at least one long-chained alcohol as a film former additive for the organic film former, c) at least one cross-linking agent, d) at least one lu bricant, and e) at least one substance based on silane, silicol, or/and silo xane or/and at least one inorganic compound in particle form having a mean p article diameter in the range of 0.005 to 0.3 .mu.m, measured on the scannin g electron microscope, and f) optionally at least one organic corrosion inhi bitor, at least one organic solvent or/and at least one additive, wherein th e metal surface is brought in contact with the aqueous composition, and a po lymer film is formed on the metal surface, having a layer thickness within t he range of 0.01 to 10 .mu.m. The invention further relates to a correspondi ng aqueous composition.

IPC 8 full level

B05D 7/16 (2006.01); **C08G 18/44** (2006.01); **C08K 5/5435** (2006.01); **C08L 69/00** (2006.01); **C08L 75/06** (2006.01); **C09D 5/08** (2006.01); **C09D 7/63** (2018.01); **C09D 169/00** (2006.01); **C09D 175/06** (2006.01)

CPC (source: EP US)

B05D 1/02 (2013.01 - US); **B05D 1/18** (2013.01 - US); **B05D 1/28** (2013.01 - US); **B05D 1/30** (2013.01 - US); **B05D 1/40** (2013.01 - US); **B05D 1/42** (2013.01 - US); **B05D 3/02** (2013.01 - US); **B05D 3/06** (2013.01 - US); **B05D 3/061** (2013.01 - US); **B05D 3/065** (2013.01 - US); **B05D 3/067** (2013.01 - US); **B05D 5/00** (2013.01 - EP US); **B05D 7/14** (2013.01 - EP US); **B05D 7/16** (2013.01 - US); **B05D 7/52** (2013.01 - US); **B32B 1/08** (2013.01 - US); **B32B 15/08** (2013.01 - US); **C08G 18/44** (2013.01 - EP US); **C08L 75/04** (2013.01 - EP US); **C09D 5/002** (2013.01 - EP US); **C09D 5/08** (2013.01 - EP US); **C09D 7/63** (2017.12 - EP US); **C09D 167/00** (2013.01 - EP US); **C09D 169/00** (2013.01 - EP US); **C09D 175/04** (2013.01 - EP US); B05D 3/0254 (2013.01 - EP US); B05D 2202/00 (2013.01 - US); B05D 2202/10 (2013.01 - EP US); B05D 2202/25 (2013.01 - US); B05D 2202/35 (2013.01 - US); B05D 2202/45 (2013.01 - US); C08K 3/011 (2017.12 - EP US); C08K 5/0025 (2013.01 - EP US); C08K 5/005 (2013.01 - EP US); C08K 5/05 (2013.01 - EP US); C08K 5/54 (2013.01 - EP US); C08K 5/5435 (2013.01 - EP US); C08K 7/18 (2013.01 - EP US); C08L 83/04 (2013.01 - EP US); C08L 91/06 (2013.01 - EP US); C23C 2222/20 (2013.01 - EP US); Y10T 29/49826 (2015.01 - EP US); Y10T 428/1355 (2015.01 - EP US); Y10T 428/259 (2015.01 - EP US); Y10T 428/2962 (2015.01 - EP US); Y10T 428/31663 (2015.04 - EP US)

C-Set (source: EP US)

1. **C09D 169/00** + **C08L 2666/20**
2. **C09D 169/00** + **C08L 2666/02**
3. **C09D 169/00** + **C08L 83/00**
4. **C09D 169/00** + **C08L 91/06**
5. **C09D 167/00** + **C08L 91/06**
6. **C09D 167/00** + **C08L 83/00**
7. **C09D 167/00** + **C08L 2666/02**

Citation (search report)

See references of WO 2008110480A1

Cited by

EP2321069A1

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 MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102007011553 A1 20080911; AR 065646 A1 20090624; AU 2008225914 A1 20080918; AU 2008225914 B2 20111222; BR PI0808680 A2 20150616; BR PI0808680 B1 20191217; CA 2680242 A1 20080918; CA 2680242 C 20151215; CN 101678397 A 20100324; CN 101678397 B 20211203; CN 104162504 A 20141126; EP 2131964 A1 20091216; JP 2010520808 A 20100617; JP 2014087796 A 20140515; JP 5553617 B2 20140716; JP 5675941 B2 20150225; KR 101597300 B1 20160225; KR 20090125175 A 20091203; MX 2009009558 A 20091028; US 2010062200 A1 20100311; US 2014134368 A1 20140515; US 8936836 B2 20150120; WO 2008110480 A1 20080918; ZA 200906528 B 20101124

DOCDB simple family (application)

DE 102007011553 A 20070309; AR P080100951 A 20080307; AU 2008225914 A 20080304; BR PI0808680 A 20080304; CA 2680242 A 20080304; CN 200880015183 A 20080304; CN 201410276529 A 20080304; EP 08717366 A 20080304; EP 2008052603 W 20080304; JP 2009553105 A 20080304; JP 2013256999 A 20131212; KR 20097021196 A 20080304; MX 2009009558 A 20080304; US 201414156720 A 20140116; US 52975208 A 20080304; ZA 200906528 A 20090918