

Title (en)

USE OF A POLYMER BASED ON IMIDO MALEIC ANHYDRIDE IN SURFACE TREATMENT OR COATING COMPOSITIONS AND IN INKS AND VARNISHES

Title (de)

VERWENDUNG VON EINEM IMIDISIERTEN MALEINSÄUREANHYDRID-POLYMER IN OBERFLÄCHENBEHANDLUNGSZUSAMMENSETZUNGEN ODER IN BESCHICHTUNGZUSAMMENSETZUNGEN UND IN TINTEN UND LACKEN

Title (fr)

UTILISATION D'UN POLYMER A BASE D'ANHYDRIDE MALEIQUE IMIDIÉ DANS DES COMPOSITIONS DE TRAITEMENT DE SURFACE OU DE REVETEMENT ET DANS LES ENCRES ET VERNIS

Publication

EP 1297078 A1 20030402 (FR)

Application

EP 01915454 A 20010308

Priority

- FR 0100702 W 20010308
- FR 0003031 A 20000309

Abstract (en)

[origin: FR2806089A1] Use of imido-maleic anhydride-based polymer, in cationic form and in aqueous solution, in surface-treatment, surface-protective and coating compositions. Use of imido-maleic anhydride-based polymer (A), in cationic form and in aqueous solution, as an agent that inhibits surface migration of water-soluble substances present in/on substrates and/or provides resistance to water and alkaline hydrolysis in surface treatment compositions, substrate coating compositions and in inks and varnishes. Polymer (A) is applied after it is placed in aqueous solution and neutralized with acid, to produce a cationic polymer. The aqueous solution of cationic polymer can be applied on its own, as primer, or in combination with at least one other component compatible with cationic polymer, such as latex, aqueous film-forming dispersions, pigments, co-solvents and other usual additives for surface treatment and coating compositions, with copolymer (A) also being used as dispersant in preparation of such compositions. More specifically, aqueous solution of cationic copolymer is formulated in combination with acrylic, vinylic or styrene-acrylic film-forming composition, to produce primer; or it is used as dispersing agent in preparation, in acidic medium, of pigment paste which is further incorporated in paint or latex composition. Independent claims are also included for: (i) a primer for treatment of substrate surface comprising the aqueous solution cationic polymer (A) of the claim; (ii) a composition for surface treatment or coating of substrate comprising polymer (A) and other component(s) selected from latex, pigments, co-solvents and usual additives, where this solution acts as dispersing agent; (iii) pigment paste comprising an acidic dispersing agent in form of polymer (A) (0.05-50 pbw), pigments (20-90 pbw), water (10-80 pbw) and acid (0.5-5); and (iv) a composition (C) for surface treatment or coating of substrate comprising latex (B) obtained by emulsion polymerization of ethylenically unsaturated monomers in an aqueous solution that comprises, (per weight of monomers), polymer (A) used as a surfactant (> 20, preferably 30 wt.%) in the presence of usual radical system.

IPC 1-7

C09D 5/00; C09D 5/02; C09D 17/00; C09D 179/08; C09D 133/02; C09D 11/10; C09D 11/02

IPC 8 full level

C03C 17/00 (2006.01); **C03C 17/32** (2006.01); **C09D 5/00** (2006.01); **C09D 5/02** (2006.01); **C09D 7/45** (2018.01); **C09D 11/10** (2006.01); **C09D 17/00** (2006.01); **C09D 179/08** (2006.01)

CPC (source: EP US)

C03C 17/009 (2013.01 - EP US); **C03C 17/32** (2013.01 - EP US); **C09D 5/002** (2013.01 - EP US); **C09D 5/027** (2013.01 - EP US); **C09D 7/45** (2017.12 - EP US); **C09D 11/102** (2013.01 - EP US); **C09D 17/001** (2013.01 - EP US); **C09D 179/085** (2013.01 - EP US)

Citation (search report)

See references of WO 0166658A1

Citation (examination)

EP 0915103 A1 19990512 - ATOCHEM ELF SA [FR]

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

FR 2806089 A1 20010914; FR 2806089 B1 20020524; AU 4254901 A 20010917; EP 1297078 A1 20030402; US 2004024135 A1 20040205; WO 0166658 A1 20010913

DOCDB simple family (application)

FR 0003031 A 20000309; AU 4254901 A 20010308; EP 01915454 A 20010308; FR 0100702 W 20010308; US 23659902 A 20020906