

Title (en)

PROCESS FOR SCRATCH- AND ABRASION-RESISTANT COATING AND PHYSICAL MATTING OF PLASTICS SUBSTRATES, MORE PARTICULARLY POLYMETHYL METHACRYLATE, WITH NANOCOMPOSITE COATING MATERIAL

Title (de)

VERFAHREN ZUR KRATZ- UND ABRASIONSBESTÄNDIGEN BESCHICHTUNG UND PHYSIKALISCHEN MATTIERUNG VON KUNSTSTOFFSUBSTRATEN, INSBESONDERE POLYMETHYLMETHACRYLAT, MIT NANOKOMPOSITLACK

Title (fr)

PROCÉDÉ POUR LE REVÊTEMENT RÉSISTANT AUX GRIFFES ET À L'ABRASION ET LE MATAGE PHYSIQUE DE SUBSTRATS PLASTIQUES, EN PARTICULIER EN POLY(MÉTHACRYLATE DE MÉTHYLE), PAR UNE LAQUE NANOCOMPOSÉE

Publication

**EP 2598561 A1 20130605 (DE)**

Application

**EP 11712805 A 20110328**

Priority

- DE 102010038617 A 20100729
- EP 2011054681 W 20110328

Abstract (en)

[origin: WO2012013364A1] The invention relates to a process for the surface-finishing of plastics substrates, preferably polymethyl methacrylate (abbreviated hereinafter to PMMA), by coating with a clear coating material comprising nanoparticles (hereinafter nanocomposite coating material) and irradiating the same with vacuum UV light of wavelength 172 nm from an Xe\* excimer lamp. This process leads to excellent adhesion of the coating substance on the substrate. It is moreover possible to give the coating surface a topography. The mechanical and chemical properties and performance characteristics of uncoated substrate are substantially exceeded when a substrate is coated in this way.

IPC 8 full level

**C08J 7/06** (2006.01); **C08J 7/043** (2020.01); **C08J 7/046** (2020.01); **C08K 9/06** (2006.01); **C09D 183/04** (2006.01)

CPC (source: EP US)

**B05D 5/02** (2013.01 - US); **C08J 7/0427** (2020.01 - EP US); **C08J 7/043** (2020.01 - EP US); **C08J 7/046** (2020.01 - EP US);  
**C08J 7/06** (2013.01 - EP US); **C09D 133/14** (2013.01 - EP US); **C08J 2333/10** (2013.01 - EP US); **C08J 2483/04** (2013.01 - EP US);  
**C08K 2201/011** (2013.01 - EP US); **C08L 2312/06** (2013.01 - EP US); **Y10T 428/24446** (2015.01 - EP US)

Citation (search report)

See references of WO 2012013364A1

Cited by

IT201800010863A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2012013364 A1 20120202**; AU 2011285153 A1 20130314; BR 112013001922 A2 20160524; CA 2806968 A1 20120202;  
CN 102985469 A 20130320; EP 2598561 A1 20130605; MX 2013001052 A 20130318; TW 201211177 A 20120316;  
US 2013129980 A1 20130523; ZA 201300728 B 20130925

DOCDB simple family (application)

**EP 2011054681 W 20110328**; AU 2011285153 A 20110328; BR 112013001922 A 20110328; CA 2806968 A 20110328;  
CN 201180033769 A 20110328; EP 11712805 A 20110328; MX 2013001052 A 20110328; TW 100110793 A 20110329;  
US 201113812946 A 20110328; ZA 201300728 A 20130128