

Title (en)
PHOTOCATALYTICALLY ACTIVE COATING OF A SUBSTRATE

Title (de)
PHOTOKATALYTISCH AKTIVE BESCHICHTUNG EINES SUBSTRATS

Title (fr)
REKETEMENT PHOTOKATALYTIQUEMENT AKTIF POUR UN SUBSTRAT

Publication
EP 1646448 A1 20060419 (DE)

Application
EP 04766238 A 20040715

Priority

- EP 2004051514 W 20040715
- EP 03102194 A 20030716
- EP 04766238 A 20040715

Abstract (en)
[origin: EP1498176A1] A building facade has an active photocatalytic coating with a first layer on a substrate incorporating a metal oxide, e.g. SiO₂, ZrO₂, Al₂O₃, Nb₂O₅, Ta₂O₅ or CaO, and a second layer of TiO₂ particles. The first layer is generally free of TiO₂ and contains at least 5 wt.% ZrO₂. The first layer contains 50-95 wt.% SiO₂ and 5-50 wt.% ZrO₂, and a further metal oxide. The substrate is a polymer and/or a metal. The polymer may be from the group PVC, PP, PE, PMMA, PS, PC, SBR being a homo-polymer, co-polymer or polymer blend. An independent claim is included for the production of the above active photocatalytic coating material.

IPC 1-7
B01J 21/06; **B01J 35/00**; **B01J 37/025**; **B01J 37/34**

IPC 8 full level
B01J 21/06 (2006.01); **B01J 35/00** (2006.01); **B01J 37/02** (2006.01); **B01J 37/025** (2006.01); **B01J 21/04** (2006.01); **B01J 23/02** (2006.01); **B01J 23/20** (2006.01); **B01J 37/34** (2006.01)

CPC (source: EP US)
B01J 21/063 (2013.01 - EP US); **B01J 21/066** (2013.01 - EP US); **B01J 35/39** (2024.01 - EP US); **B01J 37/0219** (2013.01 - EP US); **B01J 37/0228** (2013.01 - EP US); **B01J 21/04** (2013.01 - EP US); **B01J 23/02** (2013.01 - EP US); **B01J 23/20** (2013.01 - EP US); **B01J 37/344** (2013.01 - EP US)

Citation (search report)
See references of WO 2005007286A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1498176 A1 20050119; CA 2573980 A1 20050127; EP 1646448 A1 20060419; RU 2006104431 A 20070827; US 2008026161 A1 20080131; WO 2005007286 A1 20050127

DOCDB simple family (application)
EP 03102194 A 20030716; CA 2573980 A 20040715; EP 04766238 A 20040715; EP 2004051514 W 20040715; RU 2006104431 A 20040715; US 56455904 A 20040715