

Title (en)

METHOD FOR DEPOSITING A PHOTOCATALYTIC COATING AND RELATED COATINGS, TEXTILE MATERIALS AND USE IN PHOTOCATALYSIS

Title (de)

VERFAHREN ZUR ABSCHIEDUNG EINER BESCHICHTUNG, ENTSPRECHENDE BESCHICHTUNGEN, TEXTILMATERIALIEN UND VERWENDUNG IN DER PHOTOKATALYSE

Title (fr)

PROCÉDÉ DE DÉPÔT D'UN REVÊTEMENT PHOTOCATALYTIQUE, REVÊTEMENTS, MATÉRIAUX TEXTILES ET UTILISATION EN PHOTOCATALYSE ASSOCIES

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Application

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Abstract (en)

[origin: WO2014167231A2] The present invention relates to a method for depositing a photocatalytic coating onto a substrate, including the following steps: a) providing an aqueous and/or alcoholic solution of nanoparticles of a semiconductor material; b) providing a sol in an aqueous and/or alcoholic solution of a hydrolysed organosilane; c) mixing the suspension and the sol and proceeding with the deposit of the resulting mixture onto the substrate to be coated; d) performing a drying operation; e) and optionally illuminating the coating obtained after drying at at least one wavelength leading to the activation of the semiconductor material, such as to remove at least 3% of the organic groups initially present in the coating and bonded to the silicon atoms by Si-C bond. The invention also relates to coatings having photocatalytic properties, to materials — in particular textiles — covered with such a coating and to the use of such coatings and materials for photocatalysis.

IPC 8 full level

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