

Title (en)

SELF-CLEANING COMPOSITE MATERIAL, RESPECTIVE METHOD OF OBTENTION AND USES THEREOF

Title (de)

SELBSTREINIGENDER VERBUNDSWERKSTOFF, METHODE ZUR GEWINNUNG UND DEREN VERWENDUNG

Title (fr)

MATÉRIAU COMPOSITE AUTONETTOYANT, MÉTHODE D'OBTENTION FABRICATION ET LEUR UTILISATION

Publication

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Application

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Priority

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Abstract (en)

The present disclosure relates to a self-cleaning composite material capable of removing contaminants, in particular stains or spots, of solid structures after activation. Thus, the present invention describes self-cleaning structures, particularly rigid, flexible or mixed structures, and processes for producing such self-cleaning structures, especially indicated for clothing and textile articles. The referred self-cleaning composite material, by activation, comprises a substrate, a plurality of nanocomposites; wherein each nanocomposite comprises in its core SiO₂ particles coated with TiO₂ particles, wherein the nanocomposite is covalently linked to the substrate, in particular by the linkage of a silane group to a hydroxyl group.

IPC 8 full level

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Citation (applicant)

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