

Title (en)

A PROCESS FOR PREPARING OF COTTON TEXTILES HAVING SELF-CLEANING AND WASHING RESISTANT PROPERTIES

Title (de)

VERFAHREN ZUR HERSTELLUNG VON BAUMWOLLTEXTILIEN MIT SELBSTREINIGUNGS- UND WASCHBESTÄNDIGKEITSEIGENSCHAFTEN

Title (fr)

PROCÉDÉ DE PRÉPARATION DE TEXTILES EN COTON AYANT DES PROPRIÉTÉS DE RÉSISTANCE AU LAVAGE ET AUTONETTOYANTES

Publication

EP 2990527 A1 20160302 (EN)

Application

EP 15468007 A 20150811

Priority

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Abstract (en)

The invention relates to a process for the preparation of self-cleaning wash-resistant and air-permeable superhydrophobic and oleophobic cotton textiles. The coating is applied to the surface of the cotton textile and results in sliding angles for water that are lower than 10 degrees, even after 10 washings. The coatings consist of differently sized premade siloxane particles and particles grown in-situ in the presence of cotton textiles. The in-situ preparation of siloxane particles provides a bi-hierarchical surface roughness and a good connection between the siloxane particles and the textile, which is further strengthened by the use of fluorinated alkoxy silanes. The combination of the proposed solution enables improved wash-resistant properties for the coatings.

IPC 8 full level

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CPC (source: EP)

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