

Title (en)
METHOD FOR THE TREATMENT OF METAL SURFACES FOR BESTOWING THEREON A HIGH HYDROPHOBICITY AND OLEOPHOBICITY

Title (de)
VERFAHREN ZUR HERSTELLUNG HYDROPHOBER UND OLEOPHOBER BESCHICHTUNGEN AUF METALLISCHEN SUBSTRATEN

Title (fr)
PROCÉDÉ POUR LE TRAITEMENT DE SURFACES MÉTALLIQUES POUR CONFÉRER À CELLES-CI UNE HYDROPHOBICITÉ ET UNE OLÉOPHOBICITÉ ÉLEVÉES

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Application
EP 13756700 A 20130621

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Abstract (en)
[origin: WO2013190587A2] A method for the treatment of metal surfaces comprising in succession: - a step of depositing a coating of metal oxide, in which on a metal surface a sol is deposited made from a colloidal suspension in water of one or more metal alkoxides M(OR)_n in the presence of an acid catalyst, in which: M is comprised in the group consisting of Al, Ti, Si, Y, Zn, Zr; R is a linear or branched aliphatic chain C1-C4; - a step of consolidation, wherein the coating is subjected to a temperature between 150 °C and 900 °C; - a step of functionalization, in which the coating is treated with boiling water and/or steam for the realization of hydroxyl groups; - a second step of consolidation, wherein the coating is subjected to a temperature between 150 °C and 900 °C, and - a step of fluorination, wherein the coating is treated with a fluorinated compound.

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