

Title (en)

NOVEL PROCESS FOR OBTAINING SUPERHYDROPHOBIC OR SUPERHYDROPHILIC SURFACES

Title (de)

NEUARTIGES VERFAHREN ZUR GEWINNUNG VON SUPERHYDROPHOBEN ODER SUPERHYDROPHILEN OBERFLÄCHEN

Title (fr)

NOUVEAU PROCEDE D'OBTENTION DE SURFACES SUPERHYDROPHOBES OU SUPERHYDROPHILES

Publication

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Application

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Abstract (en)

[origin: WO2015177229A2] The present invention relates to a process for texturing surfaces providing the latter with superhydrophobic, superoleophobic, superhydrophilic or even superoleophilic properties. This process comprises i) a step of texturing the surface (via the deposition of nanoparticles of different sizes); ii) a step of curing the surface thus textured (with a curing agent); and, optionally, iii) a step of modifying the properties of the surface with perfluorinated (and therefore hydrophobic) molecules. This process is suitable, inter alia, for treating transparent and/or heat-sensitive materials and surfaces. Specifically, none of the steps of the process use a temperature higher than 100°C. Thus, the process of the invention is particularly suitable for treating transparent surfaces composed of non-mineral materials, such as polycarbonate for example, as it will affect neither their transparency nor their optical properties.

IPC 8 full level

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