

Title (en)
SELF-CLEANING AND SUPERHYDROPHOBIC SURFACES BASED ON TIO₂ NANOTUBES

Title (de)
SELBSTREINIGENDE UND SUPERHYDROPHOBE OBERFLÄCHEN AUF BASIS VON TIO₂-NANOTUBES

Title (fr)
SURFACES AUTONETTOYANTES ET SUPERHYDROPHOBES À BASE DE NANOTUBES EN TIO₂

Publication
EP 2794966 A2 20141029 (DE)

Application
EP 12820852 A 20121211

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• DE 102011122084 A 20111222
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• DE 2012001183 W 20121211

Abstract (en)
[origin: WO2013091601A2] The present invention relates to a process for producing a superhydrophobic coating having self-cleaning properties on a metallic substrate, a metallic substrate having a superhydrophobic coating and self-cleaning properties which can be obtained by such a process, the use of an electrolyte solution comprising ammonium sulphate and ammonium fluoride for producing a superhydrophobic coating having self-cleaning properties on a metallic substrate and also the use of a metallic substrate for protection against icing in an aircraft or for protection against soiling and/or erosion in an aircraft.

IPC 8 full level
C25D 11/26 (2006.01)

CPC (source: EP US)
C25D 11/26 (2013.01 - EP US)

Citation (search report)
See references of WO 2013091601A2

Citation (examination)
YASUDA ET AL: "Control of morphology and composition of self-organized zirconium titanate nanotubes formed in (NH₄)₂SO₄/NH₄F electrolytes", ELECTROCHIMICA ACTA, ELSEVIER, AMSTERDAM, NL, vol. 52, no. 12, 28 February 2007 (2007-02-28), pages 4053 - 4061, XP005914996, ISSN: 0013-4686, DOI: 10.1016/J.ELECTACTA.2006.11.023

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