

Title (en)  
SELF-CLEANING AND SUPERHYDROPHOBIC SURFACES BASED ON TIO<sub>2</sub> NANOTUBES

Title (de)  
SELBSTREINIGENDE UND SUPERHYDROPHOBE OBERFLÄCHEN AUF BASIS VON TIO<sub>2</sub>-NANOTUBES

Title (fr)  
SURFACES AUTONETTOYANTES ET SUPERHYDROPHOBES À BASE DE NANOTUBES EN TIO<sub>2</sub>

Publication  
**EP 2794966 A2 20141029 (DE)**

Application  
**EP 12820852 A 20121211**

Priority  
• DE 102011122084 A 20111222  
• DE 102012001912 A 20120202  
• 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 (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>/NH<sub>4</sub>F 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

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**DE 102012001912 A1 20130627**; EP 2794966 A2 20141029; US 2015299889 A1 20151022; WO 2013091601 A2 20130627; WO 2013091601 A3 20130822

DOCDB simple family (application)  
**DE 102012001912 A 20120202**; DE 2012001183 W 20121211; EP 12820852 A 20121211; US 201214367667 A 20121211