

Title (en)  
PREPARATION METHOD OF A BASE SUITABLE FOR USE TO IMPROVE THE DURABILITY OF THE SUPERHYDROPHOBIC SURFACES

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES ZUR VERBESSERUNG DER HALTBARKEIT VON SUPERHYDROPHOBEN OBERFLÄCHEN  
GEEIGNETEN TRÄGERS

Title (fr)  
PROCÉDÉ DE PRÉPARATION D'UNE BASE APPROPRIÉE POUR UNE UTILISATION POUR AMÉLIORER LA DURABILITÉ DES SURFACES  
SUPERHYDROPHOBES

Publication  
**EP 4081351 A4 20240103 (EN)**

Application  
**EP 20906023 A 20201208**

Priority  
• TR 201922041 A 20191227  
• TR 2020051254 W 20201208

Abstract (en)  
[origin: WO2021133318A1] The invention relates to a preparation method of a base suitable for use under the coating so as to obtain superhydrophobic surfaces which are suitable for easy adaptation to the industrial surfaces, has increased durability and economic life and has high repellency, comprises the following process steps; preparing a polymeric liquid mixture (i), placing a material with a three-dimensional fiber matrix structure to be used as a template (ii), coating said liquid mixture on the fiber matrix material (iii), curing and cooling the mixture (iv), separating the cured elastomeric mixture from the surface of the fiber matrix material (v).

IPC 8 full level  
**B05D 5/08** (2006.01); **C09D 183/04** (2006.01)

CPC (source: EP)  
**C09D 183/04** (2013.01); **C08G 77/12** (2013.01); **C08G 77/20** (2013.01)

C-Set (source: EP)  
**C09D 183/04** + **C08L 83/00**

Citation (search report)  
• [XI] YAN Y Y ET AL: "Mimicking natural superhydrophobic surfaces and grasping the wetting process: A review on recent progress in preparing superhydrophobic surfaces", ADVANCES IN COLLOID AND INTERFACE SCIENCE, vol. 169, no. 2, 14 September 2011 (2011-09-14), pages 80 - 105, XP028115223, ISSN: 0001-8686, [retrieved on 20110914], DOI: 10.1016/J.CIS.2011.08.005  
• [I] HOU W ET AL: "Stable polytetrafluoroethylene superhydrophobic surface with lotus-leaf structure", JOURNAL OF COLLOID AND INTERFACE SCIENCE, ACADEMIC PRESS, INC, US, vol. 333, no. 1, 1 May 2009 (2009-05-01), pages 400 - 403, XP026012278, ISSN: 0021-9797, [retrieved on 20090117], DOI: 10.1016/J.JCIS.2009.01.027  
• [X] LIU QINGQING ET AL: "Stable superhydrophobic surface based on low-density polyethylene/ethylene-propylene-diene terpolymer thermoplastic vulcanizate", JOURNAL OF APPLIED POLYMER SCIENCE, vol. 135, no. 19, 15 May 2018 (2018-05-15), US, XP093103528, ISSN: 0021-8995, Retrieved from the Internet <URL:https://api.wiley.com/onlinelibrary/tdm/v1/articles/10.1002%2Fapp.46241> DOI: 10.1002/app.46241  
• See also references of WO 2021133318A1

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)  
**WO 2021133318 A1 20210701**; EP 4081351 A1 20221102; EP 4081351 A4 20240103; TR 201922041 A2 20210726

DOCDB simple family (application)  
**TR 2020051254 W 20201208**; EP 20906023 A 20201208; TR 201922041 A 20191227