

Title (en)

ULTRA-THIN WATER AND OIL REPELLENT LAYER, MANUFACTURING METHOD AND USE IN WATCHMAKING AS EPILAME

Title (de)

HYDROPHOBE UND OLEOPHOBE ULTRADÜNNE SCHICHT, HERSTELLUNGSVERFAHREN UND ANWENDUNG BEIM UHRENBAU ALS EPILAME

Title (fr)

COUCHE ULTRA-MINCE HYDROPHOBE ET OLEOPHOBE, PROCEDE DE FABRICATION ET UTILISATION EN HORLOGERIE COMME EPILAME

Publication

EP 2084253 A1 20090805 (FR)

Application

EP 07816285 A 20071129

Priority

- CH 2007000602 W 20071129
- EP 06405504 A 20061201
- EP 07816285 A 20071129

Abstract (en)

[origin: EP1927648A1] Ultra-thin hydrophobic layer and oleophobic layer formed by self-assembly on a solid substrate surface of an aromatic compound (I), is claimed. Ultra-thin hydrophobic layer and oleophobic layer formed by self-assembly on a solid substrate surface of an aromatic compound of formula (A-B 1) (I), is claimed. A : dihydroxy substituted aromatic compound of formula (II); Z : C or N +>; X : C-H or C-L; L : electron attractor group comprising F, Cl, Br, I, CF₃, NO₂ and N(CH₃)₃ 3 +>; either Y 1H or CH₃; or XY 15-6 membered heterocyclic atom; T : NH, CO, CONH or NH₂ +>U 1 ->; U 1 ->soluble anion containing F ->, Cl ->, Br ->, I, OH ->, NO₃ ->, HSO₄ 2->, SO₄ 2->, HCO₃ 3 -> or SCN ->; and B 11-20C aliphatic linear alkyl group substituted by F. An independent claim is included for a preparation of the ultra-thin layer comprising immersing the substrate in a solution containing (I) in water or its mixture and protic solvent. [Image] [Image] [Image].

IPC 8 full level

C10M 105/54 (2006.01); **C10M 105/70** (2006.01)

CPC (source: EP US)

C10M 105/20 (2013.01 - EP US); **C10M 105/54** (2013.01 - EP US); **C10M 105/62** (2013.01 - EP US); **C10M 105/68** (2013.01 - EP US); **C10M 105/70** (2013.01 - EP US); **C10M 2207/085** (2013.01 - EP US); **C10M 2215/0425** (2013.01 - EP US); **C10M 2215/0806** (2013.01 - EP US); **C10M 2215/2203** (2013.01 - EP US); **C10N 2040/06** (2013.01 - EP US); **C10N 2050/02** (2013.01 - EP US); **Y10T 428/12556** (2015.01 - EP US); **Y10T 428/265** (2015.01 - EP US); **Y10T 428/31511** (2015.04 - EP US); **Y10T 428/31663** (2015.04 - EP US); **Y10T 428/31678** (2015.04 - EP US); **Y10T 428/31725** (2015.04 - EP US); **Y10T 428/31855** (2015.04 - EP US); **Y10T 428/31938** (2015.04 - EP US)

Citation (search report)

See references of WO 2008064511A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1927648 A1 20080604; CN 101611124 A 20091223; CN 101611124 B 20131106; EP 2084252 A1 20090805; EP 2084252 B1 20170329; EP 2084253 A1 20090805; EP 2084253 B1 20170329; JP 2010511099 A 20100408; JP 5385788 B2 20140108; US 2010068553 A1 20100318; US 2010075138 A1 20100325; WO 2008064510 A1 20080605; WO 2008064511 A1 20080605

DOCDB simple family (application)

EP 06405504 A 20061201; CH 2007000601 W 20071129; CH 2007000602 W 20071129; CN 200780043966 A 20071129; EP 07816284 A 20071129; EP 07816285 A 20071129; JP 2009538570 A 20071129; US 51623107 A 20071129; US 51686507 A 20071129