

Title (en)
METHOD FOR PRODUCING SCRATCH-RESISTANT COATING SYSTEMS DEVOID OF CONDENSATION

Title (de)
VERFAHREN ZUR HERSTELLUNG VON BESCHLAGSFREIEN KRATZFEST-SCHICHTSYSTEMEN

Title (fr)
PROCEDE DE REALISATION DE SYSTEMES DE COUCHES ANTIRAYURES SANS FORMATION DE BUEE

Publication
EP 1633805 A1 20060315 (DE)

Application
EP 04734514 A 20040524

Priority
• EP 2004005557 W 20040524
• DE 10325436 A 20030605

Abstract (en)
[origin: US2004247899A1] A process for the production of a layer system that is non-fogging and scratch resistant is disclosed. The layer system includes a substrate (S), one or more scratch-resistant layers (SR) and a non-fogging top layer (T). The process entails (a) applying one or more of at least partially cured coating composition to the substrate (S), the composition comprising a sol-gel produced polycondensate based on silane, to form a scratch-resistant layers (SR) and (b) subjecting the surface of the exposed scratch-resistant layer (SR) to flaming with simultaneous deposition of a layer which substantially comprises a compound of silicon, aluminium, titanium, indium, zirconium, tin and/or cerium to produce a non-fogging top layer (T).

IPC 1-7
C08J 7/04; C09D 183/00; C09D 5/00; G02B 1/10; B05B 7/20; B05D 1/08

IPC 8 full level
C08J 7/043 (2020.01); **C08J 7/046** (2020.01); **C08J 7/054** (2020.01); **C08J 7/056** (2020.01); **C23C 18/12** (2006.01); **C23C 20/08** (2006.01); **C23C 26/00** (2006.01); **C23C 28/00** (2006.01); **G02B 1/10** (2006.01)

CPC (source: EP KR US)
B05D 3/08 (2013.01 - KR); **B32B 33/00** (2013.01 - KR); **C08J 7/0423** (2020.01 - EP US); **C08J 7/043** (2020.01 - EP US); **C08J 7/046** (2020.01 - EP US); **C08J 7/054** (2020.01 - EP US); **C08J 7/056** (2020.01 - EP US); **C08J 7/16** (2013.01 - KR); **C23C 18/1216** (2013.01 - EP US); **C23C 18/1225** (2013.01 - EP US); **C23C 18/1233** (2013.01 - EP US); **C23C 18/1245** (2013.01 - EP US); **C23C 18/1254** (2013.01 - EP US); **C23C 26/00** (2013.01 - EP US); **C23C 28/00** (2013.01 - EP US); **G02B 1/105** (2020.05 - EP); **G02B 1/14** (2015.01 - EP US); **G02B 1/18** (2015.01 - EP US); **B82Y 30/00** (2013.01 - KR); **Y10T 428/31663** (2015.04 - EP US)

Citation (search report)
See references of WO 2004108801A1

Cited by
WO2018054847A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2004247899 A1 20041209; CA 2528063 A1 20041216; CN 1798797 A 20060705; DE 10325436 A1 20041223; EP 1633805 A1 20060315; IL 172099 A0 20110801; JP 2006526494 A 20061124; KR 20060015336 A 20060216; TW 200512237 A 20050401; WO 2004108801 A1 20041216

DOCDB simple family (application)
US 85890004 A 20040602; CA 2528063 A 20040524; CN 200480015478 A 20040524; DE 10325436 A 20030605; EP 04734514 A 20040524; EP 2004005557 W 20040524; IL 17209905 A 20051122; JP 2006508192 A 20040524; KR 20057023292 A 20051205; TW 93116048 A 20040604