

Title (en)

COMPOSITIONS FOR TREATING HARD SURFACES

Title (de)

MITTEL ZUR BEHANDLUNG HARTER OBERFLÄCHEN

Title (fr)

AGENTS POUR LE TRAITEMENT DE SURFACES DURES

Publication

**EP 2109664 B1 20101027 (DE)**

Application

**EP 07847714 A 20071204**

Priority

- EP 2007063204 W 20071204
- DE 102006057632 A 20061205
- DE 102007039652 A 20070822

Abstract (en)

[origin: US2010056415A1] The invention relates to compositions for treating a hard surface, in particular for cleaning and/or dirt-repellent treatment of a hard surface, containing a) at least one multi-armed silyl polyalkoxylate of the formula (I) (H-A)<sub>n</sub>-Z-[A-B—Si(OR<sub>1</sub>)r(R<sub>2</sub>)<sub>3-r</sub>]<sub>m</sub> (I), where Z is a (m+n)=valent radical having at least three carbon atoms, A is a divalent polyoxyalkylene radical, wherein the m+n polyoxyalkylene radicals bound to Z can be different from one another, and wherein one radical A is in each case bound to Z via an oxygen atom belonging to Z, and one oxygen atom belonging to A is bound to B or hydrogen, B is a chemical bond or a divalent organic radical having 1 to 50 carbon atoms, OR<sub>1</sub> is a hydrolysable group, R<sub>1</sub> and R<sub>2</sub> independently of one another are a linear or branched alkyl group having 1 to 6 carbon atoms and r is an integer from 1 to 3, and m is an integer #1 and n is 0 or an integer #1, and m+n has a value from 3 to 100, b) at least one surfactant, c) water and/or at least one nonaqueous solvent, d) if appropriate further conventional components of surface treatment and/or cleaning compositions which are compatible with the remaining components of the composition.

IPC 8 full level

**C11D 11/00** (2006.01); **C11D 3/37** (2006.01)

CPC (source: EP KR US)

**C11D 3/0036** (2013.01 - EP KR US); **C11D 3/3738** (2013.01 - EP KR US); **C11D 3/3742** (2013.01 - EP KR US); **C11D 3/48** (2013.01 - EP KR US); **C11D 2111/14** (2024.01 - EP US); **C11D 2111/16** (2024.01 - EP KR US); **C11D 2111/18** (2024.01 - EP KR US); **C11D 2111/24** (2024.01 - EP KR US)

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)

**US 2010056415 A1 20100304; US 7998919 B2 20110816**; AT E486120 T1 20101115; DE 102007039652 A1 20080612; DE 502007005503 D1 20101209; EP 2109664 A1 20091021; EP 2109664 B1 20101027; JP 2010511763 A 20100415; KR 20090087905 A 20090818; PL 2109664 T3 20110429; WO 2008068236 A1 20080612

DOCDB simple family (application)

**US 51737407 A 20071204**; AT 07847714 T 20071204; DE 102007039652 A 20070822; DE 502007005503 T 20071204; EP 07847714 A 20071204; EP 2007063204 W 20071204; JP 2009539726 A 20071204; KR 20097011579 A 20071204; PL 07847714 T 20071204