

Title (en)  
Colour-safe cleaning or washing agent

Title (de)  
Farbschützendes Wasch- oder Reinigungsmittel

Title (fr)  
Moyen de lavage et de nettoyage protégeant les couleurs

Publication  
**EP 2487230 A1 20120815 (DE)**

Application  
**EP 12166939 A 20080403**

Priority  
• EP 08735744 A 20080403  
• DE 102007016391 A 20070403  
• DE 102007023828 A 20070521  
• DE 102007038450 A 20070814

Abstract (en)  
Washing- or cleaning agent (A) comprises a color transfer inhibitor in the form of a polycarbonate-, polyurethane- and/or polyurea-polyorganosiloxane compounds comprising at least a carbonyl structural element (I) or its acid addition compound and/or their salts. Washing- or cleaning agent (A) comprises a color transfer inhibitor in the form of a polycarbonate-, polyurethane- and/or polyurea-polyorganosiloxane compounds comprising at least a carbonyl structural element of formula  $(-Y\ 1>-A-(C=O)-A-)$  (I) or its acid addition compound and/or their salts. Either A : S, O or NR 1>; Y 1>bivalent to polyvalent, preferably tetravalent, optionally saturated or aromatic hydrocarbon with up to 1000C containing one or more NR 2>, (N +>R 2>R 3>) (both preferred), O, (CO), NH, 2-1000 polyorganosiloxane unit with silicon atom (optionally substituted), preferably oligoethoxy and/or oligopropoxy (where its oligomerization degree is preferably 2-60) or oligoethylene imine (where its oligomerization degree is preferably 10-150000); or Y 1>A : nitrogen containing heterocyclic ring; R 1>H, optionally saturated or aromatic hydrocarbon with up to 40C, containing one or more O, (CO), NH, NR 2>, preferably oligoethoxy and/or oligopropoxy, where its oligomerization degree is preferably 2-60 or oligoethylene imine, where its oligomerization degree is preferably 10-150000; R 2>optionally saturated, aromatic hydrocarbon with up to 40C containing one or more O, (CO), NH, preferably oligoethoxy and/or oligopropoxy, where its oligomerization degree is preferably 2-60 or oligoethylene imine, where its oligomerization degree is preferably 10-150000; and R 3>optionally saturated, aromatic hydrocarbon with up to 100C containing one or more O, (CO), NH, a bivalent residue, which form cyclic structures within the Y 1>, preferably oligoethoxy and/or oligopropoxy, where its oligomerization degree is preferably 2-60 or oligoethylene imine, where its oligomerization degree is preferably 10-15,000. Provided that: in formula (I) A, Y 1>, R 1>, R 2>, R 3> are not same when at least one of the residues of Y 1> is polyorganosiloxane unit with 2-1000 silicon atom. An independent claim is included for (A) comprising the color transfer inhibitor in the form of (1,3)dioxolan-2-one compound of formula (IV) or (1,3)-diazepan-2-one compound of formula (V) and/or polymer, where the polymer is obtained by the reaction of a polymer substrate that modifies the functional groups of hydroxy-, primary and secondary amino- group with (IV) or (V). R : 1-12C-alkyl; X : CO-CH=CH 2, CO-C(CH 3)=CH 2, CO-O-aryl, 2-6C-alkylene-SO 2-CH=CH 2 or CO-NH-R 1>; R 1>1-30C-alkyl, 1-30C-haloalkyl, 1-30C-hydroxyalkyl, 1-6C-alkyloxy-1-30C-alkyl, 1-6C-alkylcarbonyloxy-1-30C-alkyl, amino-1-30C-alkyl, mono- or di(1-6C-alkyl)amino-1-30C-alkyl, ammonio-1-30C-alkyl, polyoxyalkylene-1-30C-alkyl, polysiloxanyl-1-30C-alkyl, (meth)acryloyloxy-1-30C-alkyl, sulfono-1-30C-alkyl, phosphono-1-30C-alkyl, di(1-6C-alkyl)-phosphono-1-30C-alkyl, phosphonato-1-30C-alkyl, di(1-6C-alkyl) phosphonato-1-30Calkyl or a saccharide; and k : greater than 0. Provided that: in formula (I) when k is 1, X has the above variable or when k is greater than 1 X is: (i) polyamine bounded with ((CO)-NH) or (ii) polymer skeleton bounded with (CO)-, NH-2-6C-alkylene-O(CO)- or (CO)-O-2-6C-alkylene-O(CO)- or (iii) polymer skeleton bounded with (CO)-polysiloxanyl-1-30C-alkyl-groups. [Image] .

Abstract (de)  
Die Farbschonung von Wasch- und Reinigungsmitteln bei deren Einsatz zum Waschen oder Reinigen farbiger textiler Flächegebilde sollte verbessert werden. Dies gelang im Wesentlichen dadurch, dass man in dem Mittel eine Verbindung der allgemeinen Formeln IV oder V einsetzt.

IPC 8 full level  
**C11D 3/37** (2006.01); **C11D 3/00** (2006.01); **C11D 3/20** (2006.01); **C11D 3/22** (2006.01); **C11D 3/28** (2006.01); **C11D 3/32** (2006.01); **C11D 3/34** (2006.01); **C11D 3/36** (2006.01); **C11D 11/00** (2006.01)

CPC (source: EP KR US)  
**C11D 3/0021** (2013.01 - EP US); **C11D 3/2096** (2013.01 - EP US); **C11D 3/22** (2013.01 - KR); **C11D 3/227** (2013.01 - EP US); **C11D 3/28** (2013.01 - EP US); **C11D 3/32** (2013.01 - EP KR US); **C11D 3/3454** (2013.01 - EP US); **C11D 3/349** (2013.01 - EP US); **C11D 3/364** (2013.01 - EP US); **C11D 3/37** (2013.01 - KR); **C11D 3/373** (2013.01 - EP US); **C11D 3/3742** (2013.01 - EP US); **C11D 3/3788** (2013.01 - EP US); **C11D 11/00** (2013.01 - KR); **C11D 2111/12** (2024.01 - EP US)

Citation (applicant)  
• WO 2005058863 A1 20050630 - DEUTSCHES WOLLFORSCHINST [DE], et al  
• EP 0300305 A2 19890125 - HENKEL KGAA [DE]

Citation (search report)  
• [XA] WO 2005058863 A1 20050630 - DEUTSCHES WOLLFORSCHINST [DE], et al  
• [A] WO 2006127882 A2 20061130 - DOW CORNING [US], et al

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

DOCDB simple family (publication)  
**WO 2008119832 A1 20081009**; EP 2129759 A1 20091209; EP 2129759 B1 20160727; EP 2129759 B2 20190821; EP 2487230 A1 20120815; EP 2487230 B1 20141203; KR 20090128444 A 20091215; US 2010011519 A1 20100121; US 8524648 B2 20130903

DOCDB simple family (application)  
**EP 2008053995 W 20080403**; EP 08735744 A 20080403; EP 12166939 A 20080403; KR 20097020620 A 20080403; US 56694509 A 20090925