

Title (en)  
Cleaning composition comprising fluoro-surfactants

Title (de)  
Fluorotenside enthaltendes Reinigungsmittel

Title (fr)  
Composition nettoyante contenant des tensio-actifs fluorés

Publication  
**EP 0866115 A3 19990127 (EN)**

Application  
**EP 98301652 A 19980305**

Priority  
GB 9705682 A 19970319

Abstract (en)  
[origin: EP0866115A2] The invention relates to compositions for cleaning hard surfaces, wherein said composition comprises both cleans the surface and prevents or retards further soiling of the surface and provides an aqueous, hard-surface cleaning composition comprising a surfactant mixture, wherein said surfactant mixture comprises: a) a cationic fluorosurfactant, and, b) a non-fluorinated nonionic surfactant. It is believed that the cationic fluorosurfactants present in the compositions of the present invention modify the surface energy of surfaces to which the composition is applied so as to raise the contact angle of soil subsequently deposited on the modified surface. Suitable fluorosurfactant compounds can be broadly described as compounds which contain at least one CF<sub>3</sub> moiety and a group carrying a positive charge. Preferably, the fluorosurfactants employed in the present invention are of the general formula: <math>L</math> wherein L is a linking group which is preferably selected from linear or branched aliphatic or fluoro-aliphatic chains which may contain heteroatoms and R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> are preferably short chain alkyl groups, typically C<sub>1</sub>-C<sub>5</sub> alkyl groups of which methyl groups are preferred: in an alternative, one of R<sub>1</sub>, R<sub>2</sub> or R<sub>3</sub> is itself a moiety of the form CF<sub>3</sub>-L-.

IPC 1-7

**C11D 1/00; C11D 1/83**

IPC 8 full level

**C09K 3/00** (2006.01); **C11D 1/835** (2006.01); **C11D 3/30** (2006.01); **C11D 3/43** (2006.01); **C11D 1/00** (2006.01); **C11D 1/66** (2006.01); **C11D 1/72** (2006.01)

CPC (source: EP)

**C11D 1/835** (2013.01); **C11D 3/30** (2013.01); **C11D 3/43** (2013.01); **C11D 1/004** (2013.01); **C11D 1/66** (2013.01); **C11D 1/72** (2013.01)

Citation (search report)

- [X] US 4612135 A 19860916 - WENZEL GEORGE [US]
- [X] GB 2166153 A 19860430 - PROCTER & GAMBLE
- [A] EP 0256980 A2 19880224 - CIBA GEIGY AG [CH]
- [A] DATABASE WPI Section Ch Week 8235, Derwent World Patents Index; Class D25, AN 82-73569E, XP002086564

Cited by

EP1227721A4; US7625856B2; DE112010002084T5; US7592064B2; US6790905B2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 0866115 A2 19980923; EP 0866115 A3 19990127; CA 2231598 A1 19980919; GB 9705682 D0 19970507; JP H10279990 A 19981020**

DOCDB simple family (application)

**EP 98301652 A 19980305; CA 2231598 A 19980309; GB 9705682 A 19970319; JP 6636398 A 19980317**