

Title (en)

Non-aqueous liquid detergent containing bleach

Title (de)

Nichtwässrige Flüssigwaschmittel mit Bleiche

Title (fr)

Compositions détergents liquides, non aqueuses contenant un agent de blanchiment

Publication

**EP 0972823 B1 20040922 (DE)**

Application

**EP 99113021 A 19990706**

Priority

DE 19831702 A 19980715

Abstract (en)

[origin: EP0972823A1] Cationic stabilizers comprising quaternary ammonium cations are used to stabilize bleaching agents in nonaqueous liquid detergents. Cationic stabilizers comprising quaternary ammonium cations of formula (I)-(III) are used to stabilize bleaching agents in nonaqueous liquid detergents: R<1> = 1-6C alkyl, 2-6C alkenyl or 1-6C hydroxyalkyl; R<2> = 8-28C alkyl or alkenyl; R<3> = R<1> or (CH<sub>2</sub>)<sub>n</sub>TR<2>; R<4> = R<1>, R<2> or (CH<sub>2</sub>)<sub>n</sub>TR<2>; T = CH<sub>2</sub>, OCO or COO; n = 0-5. An Independent claim is also included for a nonaqueous liquid detergent composition comprising nonionic surfactant(s), builder(s) and a bleaching agent and containing one or more compounds (I)-(III) as stabilizers.

IPC 1-7

**C11D 17/00**; **C11D 3/30**; **C11D 3/395**; **C11D 1/66**

IPC 8 full level

**C11D 1/62** (2006.01); **C11D 1/66** (2006.01); **C11D 3/30** (2006.01); **C11D 3/39** (2006.01); **C11D 3/395** (2006.01); **C11D 17/00** (2006.01)

CPC (source: EP US)

**C11D 1/62** (2013.01 - EP US); **C11D 3/3947** (2013.01 - EP US); **C11D 17/0004** (2013.01 - EP US)

Cited by

EP3130656A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**EP 0972823 A1 20000119**; **EP 0972823 B1 20040922**; AT E277164 T1 20041015; DE 19831702 A1 20000120; DE 59910563 D1 20041028; US 6372703 B1 20020416

DOCDB simple family (application)

**EP 99113021 A 19990706**; AT 99113021 T 19990706; DE 19831702 A 19980715; DE 59910563 T 19990706; US 35439299 A 19990715