

Title (en)
IMPROVEMENTS RELATING TO LAUNDRY CLEANING COMPOSITIONS

Title (de)
VERBESSERUNGEN IM ZUSAMMENHANG MIT WÄSCHEREINIGUNGSZUSAMMENSETZUNGEN

Title (fr)
AMÉLIORATION DE COMPOSITIONS NETTOYANTES DE BLANCHISSERIE

Publication
EP 2139978 A1 20100106 (EN)

Application
EP 08749624 A 20080421

Priority
• EP 2008054790 W 20080421
• GB 0707849 A 20070424
• GB 0712673 A 20070629

Abstract (en)
[origin: WO2008129026A1] The invention provides a laundry cleaning composition comprising: a) at least one laundry adjunct selected from: builder, enzyme, fluorescer, perfume, anti-redeposition polymer, soil release polymer, source of alkalinity, chelating agents other than for hardness ions, bleach or precursor thereof, and, b) a surfactant system comprising: i) at least 1%wt on total surfactant of one or more anionic surfactants, ii) at least 1%wt on total surfactant of one or more nonionic surfactants, and, iii) 0.5-30%wt on total surfactant of, a mixed cationic surfactant system consisting of a 9:1-1:9 weight ratio of one or more first cationic surfactant of general type (I) and one or more second cationic surfactant of general type (II), wherein: cationic surfactants of type I are quaternary ammonium compounds of the general formula: C₄₅₃₉ (C) CPL -53- [R₁ -N⁺ (R₂) 2-CH 2-R₃] Z⁻ (Type I): in which: Z⁻ is an anionic counter-ion, R₁ is a straight or branched C₆ to C₂₀ alkyl or alkenyl group, R₂ is, independently, a C₁ to C₄ alkyl group, R₃ is H, phenyl, benzyl or C₁ to C₂₀ alkyl benzyl, and, cationic surfactants of type II which are quaternary ammonium compounds of the general formula: [R₁ -(A) n-N⁺ (R₄) ((A) IR₅)-(A) mR₄] Z⁻ (Type II) in which: Z⁻, R₁ are as defined above, A is the same or a different C₁-C₄ alkoxy group and n, m and l are independently 0 to 30, R₄ is, independently, R₂ or a C₂-C₄ hydroxy-alkyl group, and, R₅ is R₂ or H with the proviso that should the structure of a type II cationic surfactant be such that it falls within the definition of type I cationic surfactants it shall be counted only as a type I cationic surfactant. Preferably the Type I surfactant is benzalkonium chloride and preferably the Type II surfactant is selected from the group comprising fatty dialkyl dimethyl hydroxy-ethyl ammonium chloride, fatty monoalkyl tri-ethoxy trimethyl ammonium chloride and mixtures thereof. Preferably the ratio of the type I to type II surfactant is in the range 1:1-5:1, more preferably 2:1-4:1.

IPC 8 full level
C11D 1/65 (2006.01); **C11D 1/86** (2006.01); **C11D 3/00** (2006.01)

CPC (source: EP)
C11D 1/65 (2013.01); **C11D 1/86** (2013.01); **C11D 3/48** (2013.01); **C11D 1/62** (2013.01)

Citation (search report)
See references of WO 2008129026A1

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 2008129026 A1 20081030; AT E492621 T1 20110115; BR PI0810460 A2 20141014; DE 602008004126 D1 20110203; EP 2139978 A1 20100106; EP 2139978 B1 20101222; ZA 200906773 B 20101229

DOCDB simple family (application)
EP 2008054790 W 20080421; AT 08749624 T 20080421; BR PI0810460 A 20080421; DE 602008004126 T 20080421; EP 08749624 A 20080421; ZA 200906773 A 20090929