

Title (en)

LIQUID DETERGENT COMPOSITIONS WITH SOAP, SULFO-ESTOLIDE SURFACTANT AND CELLULASE

Title (de)

FLÜSSIGE WASCHMITTEL ENTHALTEND SEIFE, SULFO-ESTOLIDE TENSID UND CELLULASE

Title (fr)

COMPOSITIONS DETERGENTES COMPRENANT UNE SAVON, UN SULFO-ESTOLIDE TENSIOACTIF ET UNE CELLULASE

Publication

EP 2906674 B1 20181107 (EN)

Application

EP 13770686 A 20130927

Priority

- EP 12188403 A 20121012
- EP 2013070282 W 20130927
- EP 13770686 A 20130927

Abstract (en)

[origin: WO2014056743A1] Liquid detergent compositions, comprising 0.5 to 40 % by weight of the total composition of at least one sulfo-estolide surfactant having the following general formula (I), wherein one of X and Y is SO₃ - Z⁺, the other of X and Y is H, and X and Y are independently assigned in each repeating unit; n is an integer from 1 to 30; A1 and A2 are linear or branched, saturated or unsaturated, substituted or un-substituted alkyl diradicals wherein the total number of carbon atoms for each repeating unit is independent and in the range of C8 to C22; a is 0, 1 or 2 and is independently assigned in each repeating unit; R is linear or branched, saturated or unsaturated, substituted or un-substituted hydrocarbon wherein the total number of carbon atoms is from 1 to 24; W is H or a monovalent or divalent metal cation, ammonium cation, substituted ammonium cation, or an alkyl or substituted alkyl group; and Z is H or a monovalent or divalent metal cation, ammonium cation, substituted ammonium cation, or an alkyl or substituted alkyl group; at least one cellulase enzyme and a soap to provide high enzyme stability even without added stabilizing agents and are environmentally friendly and have high cleaning power.

IPC 8 full level

C11D 3/386 (2006.01); **C11D 10/04** (2006.01)

CPC (source: EP)

C11D 3/38645 (2013.01); **C11D 3/38663** (2013.01); **C11D 10/042** (2013.01); **C11D 1/28** (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2014056743 A1 20140417; EP 2906674 A1 20150819; EP 2906674 B1 20181107

DOCDB simple family (application)

EP 2013070282 W 20130927; EP 13770686 A 20130927