

Title (en)

Enzyme stabilising mixtures of tensides and liquid washing or cleaning agents containing the same

Title (de)

Enzymstabilisierende Tensidmischung und flüssige Wasch- oder Reinigungsmittel enthaltend diese

Title (fr)

Mélange tensioactif stabilisant les enzymes et produit de lavage ou de nettoyage liquide les contenant

Publication

EP 2706109 B1 20201118 (DE)

Application

EP 13182272 A 20130829

Priority

DE 102012215833 A 20120906

Abstract (en)

[origin: EP2706109A2] Surfactant mixture comprises (a) at least one surfactant (I), (b) at least one surfactant (II), and (c) at least one surfactant (III), where each of the surfactants (a), (b) and (c) is present in an amount of 27-46 wt.%. Surfactant mixture comprises (a) at least one surfactant of formula (R1-O-(AO) n-SO 3 ->X +>) (I), (b) at least one surfactant of formula (R2-O-(AO) m-H) (II), and (c) at least one surfactant of formula (R3-O-SO 3 ->Y1 +>) (III), where each of the surfactants (a), (b) and (c) is present in an amount of 27-46 wt.%. R1-R3 : linear or branched, alkyl, aryl or alkylaryl (all optionally substituted); AO : ethylene oxide or propylene oxide; n, m : 1-50; A : -O- or chemical bond; and X, Y1 : monovalent cation or n-th part of an n-valent cation. An independent claim is included for a liquid detergent or cleaning agent comprising at least one enzyme.

IPC 8 full level

C11D 1/83 (2006.01); **C11D 3/386** (2006.01); **C11D 1/14** (2006.01); **C11D 1/22** (2006.01); **C11D 1/28** (2006.01); **C11D 1/29** (2006.01); **C11D 1/72** (2006.01)

CPC (source: EP)

C11D 1/83 (2013.01); **C11D 3/38663** (2013.01); **C11D 1/143** (2013.01); **C11D 1/146** (2013.01); **C11D 1/22** (2013.01); **C11D 1/28** (2013.01); **C11D 1/29** (2013.01); **C11D 1/72** (2013.01)

Cited by

WO2017144365A1

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)

EP 2706109 A2 20140312; **EP 2706109 A3 20140625**; **EP 2706109 B1 20201118**; DE 102012215833 A1 20140306

DOCDB simple family (application)

EP 13182272 A 20130829; DE 102012215833 A 20120906