

Title (en)

PREPARATIONS, THEIR PRODUCTION AND USE

Title (de)

FORMULIERUNGEN, IHRE HERSTELLUNG UND VERWENDUNG

Title (fr)

FORMULATIONS, LEUR FABRICATION ET UTILISATION

Publication

EP 3541911 B1 20200923 (DE)

Application

EP 17800781 A 20171108

Priority

- EP 16199255 A 20161117
- EP 2017078568 W 20171108

Abstract (en)

[origin: WO2018091326A1] The invention relates to a formulation containing (A) at least one non-ionic surfactant, (B) at least one graft polymer composed of (a) at least one graft base, selected from non-ionic monosaccharides, disaccharides, oligosaccharides and polysaccharides, and side chains, obtainable by grafting (b) at least one ethylenically unsaturated mono- or dicarboxylic acid and (c) at least one compound of general formula (I), wherein the variables are defined as follows: R1 is selected from methyl and hydrogen, A1 is selected from C2-C4-alkylene, R2 are identical or different and selected from C1-C4-alkyl, X- is selected from halide, mono-C1-C4-alkylsulfate and sulfate, and (C) 0 - 0.5 wt.% in total of methylglycinediacetic acid (MGDA) and glutamic diacetic acid (GLDA) and alkali metal salts of MGDA and GLDA and 0 to 0.5 wt.% in total of citric acid or an alkali metal salt of citric acid, the weight percentages being specified relative to the solids content of the respective formulation.

IPC 8 full level

C11D 1/66 (2006.01); **C11D 1/72** (2006.01); **C11D 1/722** (2006.01); **C11D 3/00** (2006.01); **C11D 3/37** (2006.01); **C11D 11/00** (2006.01)

CPC (source: EP US)

C11D 1/66 (2013.01 - EP); **C11D 1/662** (2013.01 - EP); **C11D 1/72** (2013.01 - EP); **C11D 1/721** (2013.01 - EP); **C11D 1/722** (2013.01 - EP US);
C11D 3/036 (2013.01 - EP); **C11D 3/2086** (2013.01 - US); **C11D 3/30** (2013.01 - US); **C11D 3/33** (2013.01 - US);
C11D 3/3788 (2013.01 - EP US); **C11D 2111/14** (2024.01 - EP); **C11D 2111/16** (2024.01 - EP US); **C11D 2111/18** (2024.01 - EP US)

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 2018091326 A1 20180524; EP 3541911 A1 20190925; EP 3541911 B1 20200923; ES 2839948 T3 20210706; PL 3541911 T3 20210322;
US 10844326 B2 20201124; US 2019367842 A1 20191205

DOCDB simple family (application)

EP 2017078568 W 20171108; EP 17800781 A 20171108; ES 17800781 T 20171108; PL 17800781 T 20171108; US 201716461881 A 20171108