

Title (en)

FORMULATIONS, THE PRODUCTION AND USE THEREOF, AND SUITABLE COMPONENTS

Title (de)

FORMULIERUNGEN, IHRE HERSTELLUNG UND VERWENDUNG, UND GEEIGNETE KOMPONENTEN

Title (fr)

FORMULATIONS, LEUR PRÉPARATION ET LEUR UTILISATION ET CONSTITUANTS APPROPRIÉS

Publication

**EP 3802767 A1 20210414 (DE)**

Application

**EP 19727667 A 20190529**

Priority

- EP 18176308 A 20180606
- EP 2019064013 W 20190529

Abstract (en)

[origin: WO2019233864A1] Formulations, containing (A) citric acid or an alkali metal salt of citric acid, (B) at least one graft polymer made from (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  $\alpha$ -alkyl, X is selected from halide, mono-C1-C4-alkylsulfate and sulfate, (C) together with 0 - 0.5wt. % methyl glycine diacetate (MGDA) and glutamic acid diacetate (GLDA) and alkali metal salts of MGDA and GLDA.

IPC 8 full level

**C11D 3/04** (2006.01); **C11D 3/37** (2006.01)

CPC (source: EP US)

**C11D 3/046** (2013.01 - EP); **C11D 3/2086** (2013.01 - US); **C11D 3/33** (2013.01 - US); **C11D 3/3757** (2013.01 - US); **C11D 3/3788** (2013.01 - EP US); **C11D 3/3942** (2013.01 - US); **C11D 17/003** (2013.01 - US); **C11D 3/222** (2013.01 - EP); **C11D 3/3769** (2013.01 - EP); **C11D 2111/14** (2024.01 - US)

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