Title (en)

PROCESS FOR PRODUCING A MICROCAPSULE DISPERSION COMPRISING MICROCAPSULES WITH A HYDROPHILIC CAPSULE CORE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER MIKROKAPSELDISPERSION ENTHALTEND MIKROKAPSELN MIT EINEM HYDROPHILEM KAPSELKERN

Title (fr)

PROCÉDÉ DE PRODUCTION D'UNE DISPERSION DE MICROCAPSULES CONTENANT DES MICROCAPSULES DOTÉES D'UN NOYAU HYDROPHILE

Publication

EP 3007815 A1 20160420 (DE)

Application

EP 14726608 A 20140527

Priority

- EP 13172032 A 20130614
- EP 2014060945 W 20140527
- EP 14726608 A 20140527

Abstract (en)

[origin: WO2014198531A1] The present invention relates to a process for producing a microcapsule dispersion comprising microcapsules comprising a hydrophilic capsule core and a capsule wall polymer, wherein a water-in-oil emulsion comprising a hydrophobic diluent as continuous phase, and the hydrophilic capsule core material, a monomer composition and an amphiphilic polymer is produced and then the monomers are free-radically polymerized, where the monomer composition comprises 30 to 100% by weight of one or more monomers selected from C1-C24-alkyl esters of acrylic acid and/or methacrylic acid (monomers I), 0 to 70% by weight of one or more monomers selected from acrylic acid, methacrylic acid, maleic acid, acrylic acid esters and/or methacrylic acid esters which carry hydroxy and/or carboxy groups (monomers II), 0 to 50% by weight of one or more monomers which has two or more ethylenically unsaturated radicals, (monomers III) and 0 to 30% by weight of one or more other monomers (monomers IV), in each case based on the total weight of the monomers, and the amphiphilic polymer is obtainable by free-radical polymerization of a monomer composition comprising at least one ethylenically unsaturated hydrophilic monomer and at least one ethylenically unsaturated hydrophobic monomer, to the microcapsules obtainable thereby, and to their use for the delayed release of active ingredients for construction, cosmetics, detergents and cleaners or crop protection applications.

IPC 8 full level

B01J 13/18 (2006.01); **A01N 25/28** (2006.01); **A61K 8/11** (2006.01); **C04B 40/06** (2006.01); **C11D 17/00** (2006.01)

CPC (source: EP US)

A01N 25/04 (2013.01 - EP US); **A01N 25/28** (2013.01 - EP US); **A61K 8/11** (2013.01 - EP US); **A61K 8/8152** (2013.01 - EP US); **A61Q 19/00** (2013.01 - EP US); **B01J 13/18** (2013.01 - EP US); **C04B 20/1033** (2013.01 - EP US); **C04B 38/02** (2013.01 - EP US); **C09D 133/12** (2013.01 - US); **C11D 3/38672** (2013.01 - EP US); **C11D 3/3942** (2013.01 - EP US); **C11D 3/395** (2013.01 - US); **C11D 17/0039** (2013.01 - EP US); A61K 2800/10 (2013.01 - EP US); A61K 2800/412 (2013.01 - EP US); C04B 2103/0058 (2013.01 - EP US)

Citation (search report)

See references of WO 2014198531A1

Cited by

WO2021009040A1; WO2019193094A1; WO2022090460A1; WO2018065481A1; US11491090B2; WO2024038046A1; WO2024056309A1; WO2024056308A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2014198531 A1 20141218; CA 2915373 A1 20141218; CN 105451872 A 20160330; EP 3007815 A1 20160420; JP 2016529088 A 20160923; KR 20160019549 A 20160219; MX 2015017289 A 20160805; RU 2016100814 A 20170719; RU 2016100814 A3 20180314; US 2016145459 A1 20160526

DOCDB simple family (application)

EP 2014060945 W 20140527; CA 2915373 A 20140527; CN 201480044368 A 20140527; EP 14726608 A 20140527; JP 2016518902 A 20140527; KR 20167000962 A 20140527; MX 2015017289 A 20140527; RU 2016100814 A 20140527; US 201414897986 A 20140527