

Title (en)

MSSN DISPERSION AND METHOD FOR PRODUCING THE SAME

Title (de)

MSSN-DISPERSION UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)

DISPERSION MSSN ET PROCEDE DE PRODUCTION DE LADITE DISPERSION

Publication

**EP 1605923 A2 20051221 (DE)**

Application

**EP 04712492 A 20040219**

Priority

- EP 2004001589 W 20040219
- DE 10312763 A 20030321

Abstract (en)

[origin: CA2519697A1] The invention relates to membrane-structured solid nanoparticles that have an average particle diameter ranging from 10 to 10000 nm, that are solid at 25 °C and that comprise a combination of active substance carrier particles and emulsifiers in such a manner that membranes penetrating the entire nanoparticles are formed so that emulsifiers are present in the interior and on the surface of the nanoparticles. The invention also relates to a method for producing an aqueous substance carrying dispersion in which solid active substance carrier particles on a wax, polymer or lipid basis having an average diameter ranging from 10 to 10000 nm are present. Said particles contain at least one pharmaceutical, cosmetic and/or food technological active substance. The dispersion is produced by a) mixing, at a temperature above the melting or softening point of the active substance carrier, the active substance comprising the active substance carrier on a wax, polymer or lipid basis with at least one emulsifier that leads in step b) to the formation of a lyotropic liquid-crystalline mixed phase and forming a phase B, b) mechanically mixing, at a temperature above the melting or softening point of the active substance carrier, phase B with an aqueous phase A that may contain an emulsifier, the weight ratio of phase B to phase A being 1:5 to 5:1, without using high-pressure homogenization, and forming a lyotropic liquid-crystalline mixed phase, c) diluting, to a desired final concentration of the dispersion, the mixed phase with an aqueous phase that may contain an emulsifier, at a temperature of the aqueous phase that is below the melting or softening point of the active substance carrier while stirring and without using high-pressure homogenization.

IPC 1-7

**A61K 9/51**

IPC 8 full level

**A61K 9/51** (2006.01)

CPC (source: EP KR US)

**A61K 9/10** (2013.01 - KR); **A61K 9/51** (2013.01 - KR); **A61K 9/5123** (2013.01 - EP US); **A61K 9/5146** (2013.01 - EP US); **B82Y 5/00** (2013.01 - KR)

Citation (search report)

See references of WO 2004082666A2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**DE 10312763 A1 20040930**; AU 2004222631 A1 20040930; AU 2004222631 B2 20090226; CA 2519697 A1 20040930; CA 2519697 C 20110118; EP 1605923 A2 20051221; JP 2006520750 A 20060914; KR 20050114255 A 20051205; US 2006257334 A1 20061116; WO 2004082666 A2 20040930; WO 2004082666 A3 20050512

DOCDB simple family (application)

**DE 10312763 A 20030321**; AU 2004222631 A 20040219; CA 2519697 A 20040219; EP 04712492 A 20040219; EP 2004001589 W 20040219; JP 2006500036 A 20040219; KR 20057017689 A 20050921; US 55019304 A 20040219