

Title (en)

METHOD AND DEVICE FOR PRODUCING VERY FINE PARTICLES AND COATING SUCH PARTICLES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG HOCHFEINER PARTIKEL SOWIE ZUR BESCHICHTUNG SOLCHER PARTIKEL

Title (fr)

PROCEDE ET DISPOSITIF DE FABRICATION DE PARTICULES ULTRA-FINES ET DE REVETEMENT DE TELLES PARTICULES

Publication

EP 1942873 A2 20080716 (DE)

Application

EP 06828817 A 20061013

Priority

- EP 2006009930 W 20061013
- DE 102005053862 A 20051104

Abstract (en)

[origin: CA2628562A1] Disclosed are methods and devices for producing very fine particles which are then coated with protective polymers in another step of the process. The particles are produced using a method in which a liquid flow comprising a particle-free liquid 1 that contains the active substance in a dissolved form is combined with a second liquid flow comprising a liquid 2 in a high-energy zone or no sooner than two seconds before reaching the high-energy zone. Said two liquids can be mixed with each other while the active substance dissolved in liquid 1 is insoluble or more difficult to dissolve in liquid 2 than in liquid 1 and settles in the form of particles in the high-energy zone or within a maximum of 2 seconds before reaching the high-energy zone when the two liquids are mixed. The obtained particles are introduced into an aqueous outer phase which contains the coating materials in a dissolved form and are then subjected to a drying step such that said materials settle on the particles as a closed coating. The coated particles are protected from damaging influences and are provided with modified release kinetics compared to uncoated particles.

IPC 8 full level

A61K 9/14 (2006.01); **B01F 5/06** (2006.01); **B01J 2/00** (2006.01)

CPC (source: EP US)

B01F 25/23 (2022.01 - EP US); **B01F 25/3131** (2022.01 - EP US); **B01F 25/433** (2022.01 - EP US); **B01F 25/4331** (2022.01 - EP US);
B01F 25/4335 (2022.01 - EP US); **B01F 25/4512** (2022.01 - EP US); **B01F 31/85** (2022.01 - EP US); **B01F 35/712** (2022.01 - EP US);
B01J 2/003 (2013.01 - EP US); **B01J 2/02** (2013.01 - EP US); **B01J 2/18** (2013.01 - EP US); **B01F 27/2712** (2022.01 - EP US)

Citation (search report)

See references of WO 2007051520A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

DE 102005053862 A1 20070510; CA 2628562 A1 20070510; CA 2628562 C 20160510; CN 101360482 A 20090204; EP 1942873 A2 20080716;
JP 2009514821 A 20090409; US 2009297565 A1 20091203; US 9168498 B2 20151027; WO 2007051520 A2 20070510;
WO 2007051520 A3 20080103

DOCDB simple family (application)

DE 102005053862 A 20051104; CA 2628562 A 20061013; CN 200680050270 A 20061013; EP 06828817 A 20061013;
EP 2006009930 W 20061013; JP 2008538274 A 20061013; US 9230806 A 20061013