

Title (en)
METHOD FOR DRYING AND PRODUCING MICROPOROUS PARTICLES

Title (de)
VERFAHREN ZUR TROCKNUNG UND HERSTELLUNG VON MIKROPORÖSEN TEILCHEN

Title (fr)
PROCEDE POUR SECHER ET PREPARER DES PARTICULES MICROPOREUSES

Publication
EP 1062181 B1 20040602 (DE)

Application
EP 99915573 A 19990311

Priority
• DE 19810564 A 19980311
• EP 9901591 W 19990311

Abstract (en)
[origin: US6438867B1] In a process for drying microporous, fluid-containing particles, the heat required for increasing the temperature is supplied by convection by reducing the interfacial tension of the fluid, preferably to 0 to 1/10, in particular to 0 to 1/20, of the interfacial tension of the fluid at room temperature, by appropriately increasing the temperature at from close to the critical pressure to supercritical pressure of the fluid. Furthermore, microporous, three-dimensionally networked particles are prepared by a process in which the drying process is used. In addition, an apparatus is used for carrying out the drying process, the apparatus comprising a pressure container having an inner container and pressure-withstanding outer container and suitable measuring and control apparatuses and pump apparatuses and heat exchangers, the inner container being provided for holding the particles to be dried and a gap being provided between the inner container and the outer container.

IPC 1-7
C01B 33/00

IPC 8 full level
F26B 21/10 (2006.01); **B01J 3/00** (2006.01); **C01B 33/00** (2006.01); **C01B 33/12** (2006.01); **F26B 7/00** (2006.01); **F26B 21/14** (2006.01)

CPC (source: EP KR US)
F26B 3/00 (2013.01 - KR); **F26B 7/00** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB IT LI NL SE

DOCDB simple family (publication)
US 6438867 B1 20020827; AT E268310 T1 20040615; DE 19810564 A1 19990916; DE 59909648 D1 20040708; DK 1062181 T3 20040816; EP 1062181 A2 20001227; EP 1062181 B1 20040602; ES 2222027 T3 20050116; JP 2002505956 A 20020226; JP 3535829 B2 20040607; KR 100604727 B1 20060728; KR 20010041782 A 20010525; WO 9946203 A2 19990916; WO 9946203 A3 20000406

DOCDB simple family (application)
US 62387300 A 20000911; AT 99915573 T 19990311; DE 19810564 A 19980311; DE 59909648 T 19990311; DK 99915573 T 19990311; EP 9901591 W 19990311; EP 99915573 A 19990311; ES 99915573 T 19990311; JP 2000535586 A 19990311; KR 20007010049 A 20000909