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(71) Applicant (for all designated States except US): **FERRO CORPORATION** [US/US]; 100 Lakeside Avenue, Cleveland, OH 44114 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SHEKUNOV, Boris, Y.** [GB/US]; 115 Woodland Trace, Aurora, OH 44202 (US). **CHATTOPADHYAY, Pratibhash** [IN/US]; 7729 C Oakhill Road, North Royalton, OH 44133 (US). **SEITZINGER, Jeffrey, S.** [US/US]; 314 Lazzaro Drive, Broadview Heights, OH 44147 (US).

(74) Agent: **CLARK, Kenneth, A.**; Rankin, Hill, Porter & Clark LLP, 925 Euclid Avenue, Suite 700, Cleveland, OH 44115-1405 (US).

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(54) Title: NANOPARTICLES FROM SUPERCRITICAL FLUID ANTISOLVENT PROCESS USING PARTICLE GROWTH AND AGGLOMERATION RETARDANTS

(57) Abstract: The present invention provides a method of forming particles using supercritical fluid (SCF). In accordance with the method, one or more growth retardant compounds having both SCF-philic and SCF-phobic groups are present when one or more solute materials reach a supersaturation point and begin to form particle nuclei. The growth retardant compounds can reduce the particle growth rate, increase the nucleation rate and also prevent particle agglomeration. Preferred growth retardant compounds include sugar acetates and fluorocarbons.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/17211

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 9/14

US CL : 429/489

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 429/489

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NoneElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
West Search**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,874,029 A (SUBRAMANIAM et al) 23 February 1999 (23.02.1999), abstract, col. 10, line 65, col. 17 line 50 and 18 line 35-60.	1-21
X	US 5,389,263 A (GALLAGHER et al) 14 February 1995 (14.02.1995), abstract, col. 3, line 50-65 and col. 7, line 45-65.	1-21



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:		"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Retford Berko

Telephone No. 571-272-1600