## (19) World Intellectual Property Organization International Bureau





# (43) International Publication Date 7 February 2002 (07.02.2002)

#### **PCT**

# (10) International Publication Number WO 02/09669 A3

- (51) International Patent Classification7: A61K 9/16, 9/00
- (21) International Application Number: PCT/US01/23937
- (22) International Filing Date: 30 July 2001 (30.07.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/222,067 1 August 2000 (01.08.2000) US
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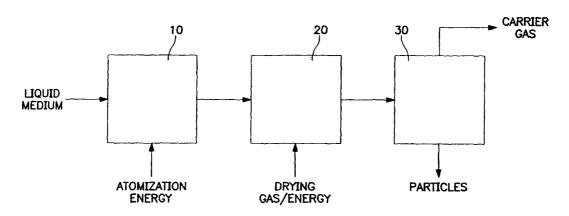
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, Fl, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, Cl, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

- -- with international search report
- (88) Date of publication of the international search report: 30 May 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS AND PROCESS TO PRODUCE PARTICLES HAVING A NARROW SIZE DISTRIBUTION AND PARTICLES MADE THEREBY



(57) **Abstract:** The present invention is directed to particles, including liquid droplets and dry particulates, having a narrow particle size distribution made from a liquid feed stock. In particular, the invention is directed to producing particles of a desired median diameter and narrow particle size distribution without the need for additional separation processing. The process of the present invention can be tailored to produce substantially monodisperse particles or multimodal particles having well defined and controllable particle size distributions. The present invention is particularly well suited for producing particles for pulmonary administration.



O 02/09669 A3

### INTERNATIONAL SEARCH REPORT

lı ational Application No PCT/US 01/23937

			101/00 01/	20307			
A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61K9/16 A61K9/00							
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)  IPC 7 A61K							
Documenta	tion searched other than minimum documentation to the extent that	such documents are inclu	uded in the fields se	earched			
	lata base consulted during the international search (name of data b	•	search terms used				
C. DOCUMENTS CONSIDERED TO BE RELEVANT							
Category °	Citation of document, with indication, where appropriate, of the re	elevant passages		Relevant to claim No.			
X	US 6 051 257 A (TOIVO T. KODAS, 18 April 2000 (2000-04-18) the whole document	ET AL.)		1-31			
Further documents are listed in the continuation of box C.  Patent family members are listed in annex.							
"A" docume consid "E" earlier of filing d "L" docume which citatior "O" docume other r "P" docume	ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another n or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or	<ul> <li>"T" later document published after the international filling date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"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</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>					
Date of the actual completion of the international search  Date of mailing of the international search report							
18 February 2002		26/02/2	26/02/2002				
Name and n	nailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Ventura Amat, A					

#### **INTERNATIONAL SEARCH REPORT**

Information on patent family members

It ational Application No
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Patent document cited in search report	Publication date	Patent family member(s)	′	Publication date
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