## (19) World Intellectual Property Organization International Bureau





## (43) International Publication Date 26 April 2001 (26.04.2001)

### **PCT**

# (10) International Publication Number WO 01/28499 A3

(51) International Patent Classification<sup>7</sup>: A61K 31/19, 31/35, 31/40

(21) International Application Number: PCT/US00/41304

(22) International Filing Date: 19 October 2000 (19.10.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

09/420,816 19 October 1999 (19.10.1999) U

(71) Applicant: NITROSYSTEMS, INC. [US/US]; Trowbridge House, 512 Telfair Street, Augusta, GA 30901 (US).

(72) Inventor: KAESEMEYER, Wayne, H.; 2433 McDowell Street, Augusta, GA 30904 (US).

(74) Agent: MILLER, Raymond, A.; Benesch, Friedlander, Coplan & Aronoff LLP, 2300 BP Tower, 200 Public Square, Cleveland, OH 44114 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, 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, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

(88) Date of publication of the international search report: 4 October 2001

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.

### INTERNATIONAL SEARCH REPORT

International application No. PCT/US00/41304

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) :A61K 31/19, 31/35, 31/40						
	US CL : 514/427, 429, 460, 557 According to International Patent Classification (IPC) or to both national classification and IPC					
<u>-</u>	DS SEARCHED					
	ocumentation searched (classification system followed	d by classification symbols)				
U.S. :	514/427, 429, 460, 557					
Documentat	ion searched other than minimum documentation to the	extent that such documents are included i	n the fields searched			
Electronic d	lata base consulted during the international search (na	me of data base and, where practicable,	search terms used)			
MEDLIN	NE, CAPLUS BIOSIS search terms: hmg coa recular, hyperlipidemia					
C. DOCUMENTS CONSIDERED TO BE RELEVANT						
Category*	Citation of document, with indication, where ap	opropriate, of the relevant passages	Relevant to claim No.			
Y	US 5,447,922 A (LAWRENCE et column 34, line 65 bridging column 3.		1-20			
Y, P	Y, P US 5,968,983 A (KAESEMEYER) 19 OCTOBER 1999, See the abstract.		1-20			
GUIJARRO et al. 3-Hydroxy-3-methylglutaryl Coenzyme A Reductase and Isoprenylation Inhibitors Induce Apoptosis of Vascular Smooth Muscle Cells in Culture, Circulation Research, 1998, Vol. 93, page 490-500, especialy the abstract and page 490.		1-20				
Y	WALTER SNEADER, Drug Prototy John Wiley and Sons Ltd. 1995, page	-	1-20			
X Further documents are listed in the continuation of Box C. See patent family annex.						
<u> </u>	ecial categories of cited documents	"T" later document published after the inte				
	neument defining the general state of the art which is not considered be of particular relevance	date and not in conflict with the appl the principle or theory underlying the				
1	rlier document published on or after the international filing date	"X" document of particular relevance, the considered novel or cannot be considered.				
	eument which may throw doubts on priority claim(s) or which is ted to establish the publication date of another citation or other	when the document is taken alone	, , , , , , , , , , , , , , , , , , ,			
sp "O" do	ecial reason (as specified)  cument referring to an oral disclosure, use, exhibition or other	"Y" document of particular relevance, the considered to involve an inventive combined with one or more other such	step when the document is a documents, such combination			
"P" document published prior to the international filing date but later than the priority date claimed		being obvious to a person skilled in the art  "&" document member of the same patent family				
	actual completion of the international search	Date of mailing of the international sea	irch report			
25 JANUARY 2001		11 APR 2001				
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks			ERRY J. DEY			
Box PCT Washington, D.C. 20231		Direction	EGAL SPECIALIST			
Facsimile No. (703) 305-3230		Telephone No. (703) 308-1233	LOGY CENTER 1600			

### INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/41304

C (Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	T
Category*	Citation of document, with indication, where appropriate of the relevant passages	Relevant to claim No.
Y	Database Medline on STN, US National Library of Medicine, (Bethesda, MD, USA), No. 99219745, YADA et al. 'Inhibition by simvastatin, but not pravastatin, of glucose-induced cytosolic Ca2+ singalling and insulin secretion due to blockade of L-type Ca2+ channels in rat islet beta-cells,' abstract, BRITISH JOURNAL OF PHARMACOLOGY, MARCH 1999, see entire reference.	1-20