



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : A61K 31/135, A61P 25/00	A3	(11) International Publication Number: WO 00/32178 (43) International Publication Date: 8 June 2000 (08.06.00)
(21) International Application Number: PCT/US99/28362 (22) International Filing Date: 1 December 1999 (01.12.99) (30) Priority Data: 09/204,124 2 December 1998 (02.12.98) US (71)(72) Applicant and Inventor: MUELLER, Peter, Sterling [US/US]; 601 Ewing Street, Suit B-3, Princeton, NJ 08540 (US). (74) Agents: SCOLA, Daniel, A., Jr.; Hoffmann & Baron, LLP, 6900 Jericho Turnpike, Syosset, NY 11791 (US) et al.	(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, 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 <i>With international search report.</i> (88) Date of publication of the international search report: 5 October 2000 (05.10.00)	
(54) Title: USE OF SIBURAMINE FOR THE TREATMENT OF DISORDERS OF THE CENTRAL NERVOUS SYSTEM SECONDARY TO ORGANIC IMPAIRMENTS (57) Abstract A method for treatment of neuropsychiatric symptoms or disorders emanating from primary brain or systemic impairments includes administration of an effective dose of a dopamine, serotonin, and norepinephrine reuptake inhibitor to a human in need of such treatment. The preferred reuptake inhibitor is sibutramine.		

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 99/28362

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K31/135 A61P25/00

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 A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 339 280 A (KAKEN PHARMA CO LTD) 2 November 1989 (1989-11-02) the whole document & US 4 939 175 A (.) cited in the application ---	1-7
X	WO 94 00047 A (SEPRACOR INC) 6 January 1994 (1994-01-06) the whole document ---	1-7
X	WO 94 00114 A (SEPRACOR INC) 6 January 1994 (1994-01-06) the whole document ---	1-7
E	WO 00 10551 A (SEPRACOR INC) 2 March 2000 (2000-03-02) the whole document ---	1-7
	-/--	

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *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)
- *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

- *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
- *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
- *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.
- *&* document member of the same patent family

Date of the actual completion of the international search

19 June 2000

Date of mailing of the international search report

27/06/2000

Name and mailing 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

Orviz Diaz, P

INTERNATIONAL SEARCH REPORT

International Application No
 PCT/US 99/28362

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 21615 A (BOOTS CO PLC ;BUCKETT WILLIAM ROGER (GB)) 17 August 1995 (1995-08-17) abstract; claims -----	1-7
X	A.M. GRAY: "The involvement of the opioidergic system in the antinociceptive mechanism of action of antidepressant compounds" BR. J. PHARMACOL., vol. 124, no. 4, June 1998 (1998-06), pages 69-674, XP000909217 the whole document -----	1-7

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Present claim 1 relates to an extremely large number of possible compounds. Support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT is to be found, however, only for sibutramine. Moreover, the therapeutic indications mentioned in the claims are defined in such a broad way that a meaningful search over the whole of the claimed scope is impossible. The search had to be limited to the use of sibutramine for the treatment of diseases of the central nervous system.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/28362

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0339280 A	02-11-1989	JP 1250315 A	05-10-1989
		JP 2675573 B	12-11-1997
		US 4939175 A	03-07-1990
WO 9400047 A	06-01-1994	AU 4542993 A	24-01-1994
		CA 2139000 A	06-01-1994
		EP 0708639 A	01-05-1996
		JP 7508281 T	14-09-1995
WO 9400114 A	06-01-1994	AU 4529897 A	05-02-1998
		AU 4542893 A	24-01-1994
		CA 2138998 A	06-01-1994
		EP 0647134 A	12-04-1995
		JP 8500093 T	09-01-1996
WO 0010551 A	02-03-2000	AU 5781799 A	14-03-2000
WO 9521615 A	17-08-1995	AU 1578295 A	29-08-1995
		ZA 9501088 A	23-01-1996