

(11) EP 1 889 612 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 19.03.2008 Bulletin 2008/12

(51) Int Cl.: A61K 31/00 (2006.01) A61P 13/10 (2006.01)

A61K 31/198 (2006.01)

(43) Date of publication A2: 20.02.2008 Bulletin 2008/08

(21) Application number: 06117729.1

(22) Date of filing: 24.07.2006

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated Extension States:

AL BA HR MK YU

(71) Applicant: Bruinstroop, Jan Kees Piet 2111 AA Aerdenhout (NL)

(72) Inventor: Bruinstroop, Jan Kees Piet 2111 AA Aerdenhout (NL)

 (74) Representative: van Westenbrugge, Andries Nederlandsch Octrooibureau Postbus 29720
 2502 LS Den Haag (NL)

(54) Method for controlling micturition

(57) The present invention concerns the stimulation of neural tissue, in particular brain tissue for the control of micturition. By activation of the pontine micturition centre (PMC) to induce micturition and deactivation of the pontine micturition centre to inhibit micturition, patients

suffering from overactive bladder (OAB) and urge incontinence regain control of the disposal of urine. This treatment will greatly improve these patients' quality of life and helps them to restore their self-confidence.

EP 1 889 612 A3



Application Number

which under Rule 63 of the European Patent Convention EP 06 11 7729 shall be considered, for the purposes of subsequent proceedings, as the European search report

ı	DOCUMENTS CONSID	ERED TO BE RELEVANT		
Category	Citation of document with in of relevant pass:	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	Inducing Sites In T Of The Mesencephalo JOURNAL OF UROLOGY,	BALTIMORE, MD, US, tober 2002 (2002-10), 005539714	1-10	INV. A61K31/00 A61K31/198 A61P13/10
X	METABOTROPIC GLUTAM THE MICTURITION REF URETHANE-ANESTHETIZ	ED RATS" ODYNAMICS, WILEY-LISS, 3, pages 611-616,	1,2,9,10	
		-/		TECHNICAL FIELDS SEARCHED (IPC)
				A61K A61P
INCO	MPLETE SEARCH			
not comply be carried Claims se		application, or one or more of its claims, does/ a meaningful search into the state of the art ca y, for these claims.		
Claims no	t searched :			
	r the limitation of the search: Sheet C			
	Place of search	Date of completion of the search		Examiner
	Munich	7 December 2007	Est	añol, Inma
X : parti Y : parti docu A : tech	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with anothenent of the same category nological background written disclosure	T : theory or principle E : earlier patent doc after the filing date D : document cited in L : document cited fo	underlying the in ument, but publis e the application or other reasons	vention hed on, or

EPO FORM 1503 03.82 (P04E07)

2



Application Number

EP 06 11 7729

	DOCUMENTS CONSIDERED TO BE RELEVANT		CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
Х	PEHRSON ET AL: "Effects of gamma-Aminobutyrate B Receptor Modulation on Normal Micturition and Oxyhemoglobin Induced Detrusor Overactivity in Female Rats" JOURNAL OF UROLOGY, BALTIMORE, MD, US, vol. 168, no. 6, December 2002 (2002-12), pages 2700-2705, XP005539606 ISSN: 0022-5347 * the whole document *	1,4,5,9, 10	
X	MIYAZATO ET AL: "DIETARY GLYCINE INHIBITS BLADDER ACTIVITY IN NORMAL RATS AND RATS WITH SPINAL CORD INJURY" JOURNAL OF UROLOGY, BALTIMORE, MD, US, vol. 173, no. 1, January 2005 (2005-01), pages 314-317, XP005529580 ISSN: 0022-5347 * the whole document *	1,7,8,10	TECHNICAL FIELDS SEARCHED (IPC)
X	MIYAZATO MINORU ET AL: "Inhibitory effect of intrathecal glycine on the micturition reflex in normal and spinal cord injury rats" EXPERIMENTAL NEUROLOGY, ACADEMIC PRESS, NEW YORK, NY, US, vol. 183, no. 1, September 2003 (2003-09), pages 232-240, XP002325891 ISSN: 0014-4886 * the whole document * -/	1,7-10	

3



Application Number

EP 06 11 7729

	DOCUMENTS CONSIDERED TO BE RELEVANT		CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
Y	NISHIJIMA ET AL: "ACTIVATION OF THE ROSTRAL PONTINE RETICULAR FORMATION INCREASES THE SPINAL GLYCINE LEVEL AND INHIBITS BLADDER CONTRACTION IN RATS" JOURNAL OF UROLOGY, BALTIMORE, MD, US, vol. 173, no. 5, May 2005 (2005-05), pages 1812-1816, XP005529271 ISSN: 0022-5347 * the whole document *	1,7-10	
Χ	EP 0 581 167 A (KYORIN SEIYAKU KK [JP]) 2 February 1994 (1994-02-02) * examples 1-3 *	1,2,10	
Y	KONTANI ET AL: "A METHOD FOR PRODUCING OVERACTIVE BLADDER IN THE RAT AND INVESTIGATION OF THE EFFECTS OF GABACTRIC RECEPTOR AGONISTS AND GLUTAMATERGIC RECEPTOR ANTAGONISTS ON THE CYSTOMETROGRAM" JOURNAL OF UROLOGY, BALTIMORE, MD, US, vol. 173, no. 5, May 2005 (2005-05), pages 1805-1811, XP005529270 ISSN: 0022-5347 * the whole document *	1,2,4,5, 9,10	TECHNICAL FIELDS SEARCHED (IPC)
Y	KAKIZAKI HIDEHIRO ET AL: "Role of spinal glutamatergic transmission in the ascending limb of the micturition reflex pathway in the rat" JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS, vol. 285, no. 1, April 1998 (1998-04), pages 22-27, XP002461360 ISSN: 0022-3565 * the whole document *	1-3,9,10	

4



Application Number

EP 06 11 7729

	DOCUMENTS CONSIDERED TO BE RELEVANT		CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
Х	WO 02/15902 A (MERCK & CO INC [US]; MERCK FROSST CANADA INC [CA]; BROTEN THEODORE P [) 28 February 2002 (2002-02-28) * claims 16,18 *	1,5,10	
D,Y	US 6 227 203 B1 (RISE MARK T [US] ET AL) 8 May 2001 (2001-05-08) * the whole document *	1-5,7-10	
			TECHNICAL FIELDS
			SEARCHED (IPC)



INCOMPLETE SEARCH SHEET C

Application Number

EP 06 11 7729

Claim(s) searched completely: 3,6,8

Claim(s) searched incompletely: 1,2,4,5,7,9,10 (part)

Claim(s) not searched: 1,2,4,5,7,9,10 (part)

Reason for the limitation of the search:

The compounds used for the preparation of the medicament claimed in claim 1 are compounds not clearly defined because they are defined in functional terms. This would require an equally unquantifiable and thus unreasonable amount of experimentation, imposing a severe and undue burden on all those wishing to ascertain the scope of the claim, which is not in compliance with the clarity requirement of Article 84 EPC. The non-compliance with the substantive provisions is to such an extent, that a meaningful search of the whole claimed subject-matter of the claim could not be carried out (Rule 63 EPC and Guidelines B-VIII, 3).

The extent of the search was consequently limited to the clearly defined compounds which are capable of stimulating / inhibiting the pontine micturition center (PMC) or the periaqueductal gray (PAG), namely glutamate, glycine and gamma-amino butiric acid (GABA).

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 06 11 7729

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

07-12-2007

AU 4216993 A 03-02-1 CA 2101310 A1 28-01-1 DE 69305276 D1 14-11-1 DE 69305276 T2 30-04-1 ES 2093332 T3 16-12-1 HU 64944 A2 28-03-1 JP 3429338 B2 22-07-2 JP 6092921 A 05-04-1 US 5439919 A 08-08-1	AU 4216993 A 03-02-1 CA 2101310 A1 28-01-1 DE 69305276 D1 14-11-1 DE 69305276 T2 30-04-1 ES 2093332 T3 16-12-1 HU 64944 A2 28-03-1 JP 3429338 B2 22-07-2 JP 6092921 A 05-04-1 US 5439919 A 08-08-1	AU 4216993 A 03-02-1 CA 2101310 A1 28-01-1 DE 69305276 D1 14-11-1 DE 69305276 T2 30-04-1 ES 2093332 T3 16-12-1 HU 64944 A2 28-03-1 JP 3429338 B2 22-07-2 JP 6092921 A 05-04-1 US 5439919 A 08-08-1	Patent document cited in search report		Publication date		Patent family member(s)	Publicatio date
			EP 0581167	A	02-02-1994	AU CA DE DE ES HU JP JP	4216993 A 2101310 A1 69305276 D1 69305276 T2 2093332 T3 64944 A2 3429338 B2 6092921 A	15-10-1 03-02-1 28-01-1 14-11-1 30-04-1 16-12-1 28-03-1 22-07-2 05-04-1 08-08-1
US 6227203 B1 08-05-2001 NONE	US 6227203 B1 08-05-2001 NONE	US 6227203 B1 08-05-2001 NONE	WO 0215902	Α	28-02-2002	AU	8655701 A	04-03-2
			US 6227203	B1	08-05-2001	NONE		
re details about this annex : see Official Journal of the European Patent Office, No. 12/82								