

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
19 March 2009 (19.03.2009)

(10) International Publication Number  
**WO 2009/034433 A3**

PCT

(51) International Patent Classification:

**C07D 403/12** (2006.01) **A61K 31/4439** (2006.01)  
**C07D 401/12** (2006.01) **A61P 25/00** (2006.01)  
**A61K 31/4184** (2006.01)

(21) International Application Number:

PCT/IB2008/002321

(22) International Filing Date:

8 September 2008 (08.09.2008)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1727/MUM/2007 10 September 2007 (10.09.2007) IN

(71) Applicant (for all designated States except US): **GLEN-MARK PHARMACEUTICALS, S.A.** [CH/CH];  
Chemin de la Combeta 5, CH-2300 La Chaux-de-Fonds (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GHARAT, Laxmikant, Atmaram** [IN/IN]; Flat No-203, Tirupati Apartments, Pokhran Road No-2, Majiwada, Thane (W) 400 601 (IN). **NARAYANA, Lakshminarayana** [IN/IN]; No. 302, Emerald, Aradhanadeep CHS, Plot No. 85, Plot No. 85, Sector 6, Koparkhairane, Navi Mumbai 400 709 (IN). **KHAIRATKAR-JOSHI, Neelima** [IN/IN]; C-101, Dev Prayag CHS, Bhakti Mandir Rd., Near Hari Niwas, Pachpakhadi, Thane (W) 400 602 (IN). **KATTIGE, Vidya, G.** [IN/IN]; 101, Eureka, Hiranandani Estate, Patlipada, Off Ghodbunder Road, Thane (W) 400 607 (IN).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

5 November 2009

(54) Title: 3-AZABICYCLO [3.1.0] HEXANE DERIVATIVES AS VANILLOID RECEPTOR LIGANDS

(57) Abstract: The present invention relates to 3-azabicyclo [3.1.0] hexane derivatives, which can be used as vanilloid receptor ligands, methods of treating diseases, conditions and/or disorders modulated by vanilloid receptors with them, and processes for preparing them.



WO 2009/034433 A3

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/IB2008/002321

## A. CLASSIFICATION OF SUBJECT MATTER

INV. C07D403/12 C07D401/12 A61K31/4184 A61K31/4439 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)

C07D 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)

EPO-Internal, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	WO 2008/010061 A (GLENMARK PHARMACEUTICALS SA [CH]; GHARAT LAXMIKANT ATMARAM [IN]; JOSHI) 24 January 2008 (2008-01-24) -----	1,8-21
A	WO 2004/078749 A (GLAXO GROUP LTD [GB]; MOSS STEPHEN FREDERICK [GB]; RAMI HARSHAD KANTIL) 16 September 2004 (2004-09-16) claims 1,20-23; examples 1,2; table 1 -----	1,8-21
A	WO 02/090326 A (SMITHKLINE BEECHAM PLC [GB]; RAMI HARSHAD KANTILAL [GB]; THOMPSON MERV) 14 November 2002 (2002-11-14) cited in the application page 14 - page 15; claims 1,8-10; examples 1,2 ----- -/--	1,8-21

☒ Further documents are listed in the continuation of Box C.

☒ See patent family 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

7 September 2009

Date of mailing of the international search report

17/09/2009

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040,  
Fax: (+31-70) 340-3016

Authorized officer

Rufet, Jacques

## INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2008/002321

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>RENSLO, ADAM R. ET AL: "Conformational Constraint in Oxazolidinone Antibacterials. Synthesis and Structure-Activity Studies of (Azabicyclo[3.1.0]hexylphenyl)oxazolidinones"</p> <p>JOURNAL OF MEDICINAL CHEMISTRY , 48(15), 5009-5024 CODEN: JMCMAR; ISSN: 0022-2623, vol. 48, no. 15, 2005, pages 5009-5024, XP002544540</p> <p>page 5011, scheme 5a; page 5012, scheme 9a; table 2, compound 40</p> <p>-----</p>	1,22

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2008/002321

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 2008010061	A	24-01-2008	AR 061905 A1	01-10-2008
WO 2004078749	A	16-09-2004	EP 1603899 A1	14-12-2005
			JP 2006519826 T	31-08-2006
			US 2007117820 A1	24-05-2007
WO 02090326	A	14-11-2002	EP 1392651 A1	03-03-2004
			JP 2004527571 T	09-09-2004
			US 2004171639 A1	02-09-2004