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(54) Title: GLUCOSYLCERAMIDE SYNTHASE INHIBITORS

(57) Abstract: The invention relates to inhibitors of glucosylceramide synthase (GCS) useful for the treatment metabolic diseases, such as lysosomal storage diseases, either alone or in combination with enzyme replacement therapy, and for the treatment of cancer.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 12/29417

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A01N 43/00 (2012.01)

USPC - 514/211.14

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)

USPC: 514/211.14

IPC: A01N 43/00 (2012.01)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 514/211.05; 514/211.01; 514/212.08 (see search terms below)

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

WEST: PGPB, USPT, USOC, EPAB, JPAB

Google: Scholar/patents : glucosylceramide synthase inhibitors azabicyclo carbamate defect glycosphingolipid pathway fabry alzheimer's parkinson's bridged modulators enzyme replacement therapy substrate

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2010/091104 A1 (CHAN et al) 12 August 2010 (12.08.2010) para [0002];[0009];[0018]; [0023];[0049]-[0051];[0054];[0083]	1-271
Y	WO 2010/0144554 A1 (IBRAGHIMOV-BESKROVNAYA et al) 04 February 2010 (04.02.2010) pg 5, ln 20-23; pg 8, ln 14; pg 8, ln 22-27; pg 9, ln 7-11; pg 11, ln 18; pg 11, ln 24 This document can be viewed by entering the doc number at the following url: http://worldwide.espacenet.com/numberSearch?locale=en_EP	1-271
Y	MARKS et al. Identification of Active Site Residues in Glucosylceramide Synthase, Journal of Biological Chemistry, 2001, 276, pp 26492-26498. pg 26492, abstract; pg 26494, Col 2, para 2-3; pg 26495, Figure 2A; pg 26496, Col 1, para 2; pg 26497, Table III	18;22;23;25-30;37;40-44; 46-51;53-247;256;257; 268;269
Y	US 2006/0058349 A1 (ALI et al) 16 March 2006 (16.03.2006) para [0017];[0151]	252-254
Y	US 2009/0163500 A1 (LINGWOOD et al) 25 June 2009 (25.06.2009) para [0278];[0285];[0286]; [0289];[0317]	262-267

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

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"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

14 June 2012 (14.06.2012)

Date of mailing of the international search report

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