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(54) Title: NOVEL ARYLOXYPROPANAMINES

(57) Abstract: The present invention relates to an aryloxypropanamine containing one or more deuterium or ¹³C in place of a hydrogen or carbon, respectively. These isotopic aryloxypropanamines of the invention are inhibitors of serotonin and norepinephrine uptake and possess unique biopharmaceutical and pharmacokinetic properties compared to the corresponding light atom isotopologues. The invention further provides compositions comprising these isotopic aryloxypropanamines and methods of treating diseases and conditions linked to reduced neurotransmission of norepinephrine and/or serotonin. It further provides methods for using these isotopic aryloxypropanamines to accurately determine the concentration of the light atom isotopologues in biological fluids, and of studying the metabolism of the light atom isotopologues.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/25652

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61K 31/44, 31/425, 31/38 (2007.01)

USPC - 514/357

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(8) - A61K 31/44, 31/425, 31/38 (2007.01)

USPC - 514/357

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 practicable, search terms used)

PubWEST, Google Scholar Database, Google Patents Database
(search terms used: aryloxypropanamine; thienyl; deuterium; hydrogen)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,143,938 A (Calvet, et al.) 01 September 1992 (01.09.1992) column 1, line 21-24, line 40-column 2, line 14, column 18, line 54-57, column 19, line 44-46, column 21, line 14-22, column 43, line 53-column 44, line 28	1-3, 7-10, 21-28, 42-43
Y		4-6, 11-20, 29-41
Y	US 6,878,659 B2 (Tashino, et al.) 12 April 2005 (12.04.2005) column 10, line 21-23	17-18
Y	US 6,596,756 B1 (Goldstein, et al.) 22 July 2003 (22.07.2003) column 1, line 18-20, column 3, line 26-31, column 4, line 13-column 5, line 26	29-41
Y	US 6,399,731 B2 (King, et al.) 04 June 2002 (04.06.2002) column 9, line 16-40	4
Y	US 6,245,802 B1 (Iyengar, et al.) 12 June 2001 (12.06.2001) column 2, line 5-23	12-16
Y	US 6,228,876 B1 (Camden) 08 May 2001 (08.05.2001) column 2, line 11-22	5-6
Y	CYMBALTA (duloxetine hydrochloride) Delayed-release Capsules DESCRIPTION, 2004, [retrieved on 2007-03-07]. Retrived from the Internet: <URLhttp://www.fda.gov/cder/foi/label/2004/21733lbl.pdf>	11-20

 Further documents are listed in the continuation of Box C.

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