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(54) Title: METHODS FOR THE SYNTHESIS OF UNSYMMETRICAL CYCLOALKYL SUBSTITUTED XANTHINES

(57) Abstract: The present invention provides compounds and pharmaceutical compositions that are selective antagonists of A2B adenosine receptors (ARs). These compounds and compositions are useful as pharmaceutical agents. Also provided are processes for the preparation of the compounds and their intermediates.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/06838

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - A01N 57/00 (2008.04); A61K 31/675 (2008.04)
 USPC - 514/81
 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; 514/81

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 (USPT, PGPB, USOC, EPAB and JPAB); Google Scholar.
 Search terms: xanthine, adenosine receptors, AR,AR?, acylation, dichloromethane or methylene dichloride, pyridine, diamine, pyridine substituted xanthine, cycloalkyl or cyclopropyl substituted (see search history).

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- Y	US 6,825,349 B2 (KALLA et al), 30 November 2004 (30.11.2004); col 23, ln 1-21; col 22, ln 28-52, 63-67; col 2, ln 63-67, 40-53; col 8, ln 58-62; col 5, ln 3-8; col 20, compound 17, ln 61-67; col 25, ln 15-30; col 11, ln 10-14; col 32, ln 44-48; col 3, ln 5-8.	14-16, 24-27 ----- 1-13, 17-23
Y	US 2004/0192708 A1 (DUNTEN et al), 30 September 2004 (30.09.2004), paras [0002], [0015], [0016], [0022] - [0024], [0229], pg 11, Scheme I.	1-13
Y	US 6,187,780 B1 (BLECH et al), 13 February 2001 (13.02.2001), col 13, ln 24-46, 50-53; col 1, ln 15-25; col 24, ln 31-37; col 18, ln 40-44.	2, 3, 6, 11-13
Y	US 6,248,746 B1 (CHASIN et al), 19 June 2001 (19.06.2001); col 12, ln 30-67, 5-10; col 6, ln 28-64; col 2, ln 40-52; col 3, ln 1-24, 43-44.	17-23

Further documents are listed in the continuation of Box C.

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