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(54) **Title:** TETRAHYDRO-ISOHUMULONE DERIVATIVES, METHODS OF MAKING AND USING

(57) **Abstract:** The present application provides novel tetrahydro-isohumulone (THIAA) derivatives and substantially enantiomerically pure compositions and pharmaceutical formulations thereof. The application further provides methods of using the disclosed compounds and compositions to activate PPAR γ , inhibit inflammation, and treat conditions associated with inflammation and conditions responsive to PPAR γ modulation such as diabetes.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2013/049788

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C07C 49/743 (2013.01)

USPC - 568/379

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 31/122; C07C 49/597, 49/707, 49/743 (2013.01)

USPC - 514/675, 690; 568/379

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

CPC - A61K 31/122; C07C 49/597, 49/707, 49/743 (2013.01)

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

PatBase, Google Patents, Google, Google Scholar, PubChem

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2012/0108671 A1 (CARROLL et al) 03 May 2012 (03.05.2012) entire document	1-10
A	US 2011/0117252 A1 (BUFFIN et al) 19 May 2011 (19.05.2011) entire document	1-10
A	US 2011/0257074 A1 (CARROLL et al) 20 October 2011 (20.10.2011) entire document	1-10

Further documents are listed in the continuation of Box C.

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"&" document member of the same patent family

Date of the actual completion of the international search

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