



(51) International Patent Classification:

A61K 31/16 (2006.01) *C07C 13/16* (2006.01)
C07C 13/02 (2006.01)

(21) International Application Number:

PCT/US2015/059271

(22) International Filing Date:

5 November 2015 (05.11.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/075,663 5 November 2014 (05.11.2014) US

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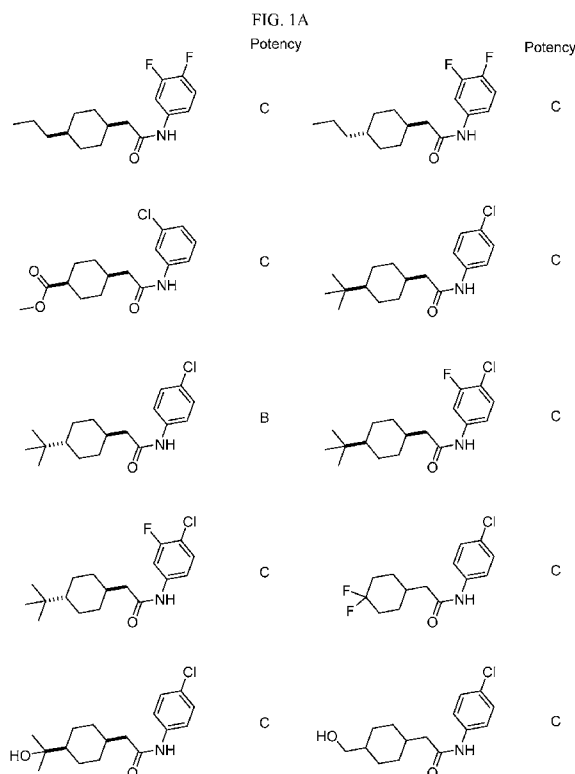
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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,

[Continued on next page]

(54) Title: IMMUNOREGULATORY AGENTS



(57) Abstract: Compounds that modulate the oxidoreductase enzyme indoleamine 2,3- dioxygenase, and compositions containing the compounds, are described herein. The use of such compounds and compositions for the treatment and/or prevention of a diverse array of diseases, disorders and conditions, including cancer- and immune -related disorders, that are mediated by indoleamine 2,3-dioxygenase is also provided.



HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE,

SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

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:

7 July 2016

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US15/59271

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61K 31/16; C07C 13/02, 13/16 (2015.01)

CPC - A61K 31/16; C07C 13/02, 13/16

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 31/16; A61P 31/18, 35/00; C07C 13/02, 13/16 (2015.01)

CPC: A61K 31/16; C07C 13/02, 13/16

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)

PatSeer; Google; Google Scholar; IP.com; PubMed; EBSCO; Flexus Biosciences, Beck, Jaen, Osipov, Powers, Reilly, Shunatona, Walker, Zibinsky, Balog, Williams, Guo, 2-[4-(dimethylamino)-4-phenylcyclohexyl]-N-phenylacetamide, acetamide, indoleamine 2,3-dioxygenase, radiation, patient, prior, after, immunosuppression, cancer, pancreatic, melanoma, viral, cytomegalovirus, HIV

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2007/0129347 A1 (HINZE, C et al.) 07 June 2007; abstract; paragraphs [0028], [0038], [0108], [0114], [0118], [0264], [0299]; claims 28, 32	1-7, 9-10, 13-14, 20-21, 39
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Y		8, 11-12, 15-19, 22-38, 40-50, 53-70, 71/57, 71/60, 71/61, 71/66
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A		51-52
Y	WO 2000/56727 A (MERCK SHARP and DOHME LIMITED) 28 September 2000; page 9, lines 15-20; page 16, lines 10-15	8
Y	US 2010/0008866 A1 (BLUM, CA et al.) 14 January 2010; paragraphs [0181], [0219]	11-12, 16-17, 22-38
Y	US 2008/0146569 A1 (BLAKE, TD et al.) 19 June 2008; paragraphs [0100], [0373]	15-19
Y	WO 2014/150677 A1 (BRISTOL-MYERS SQUIBB COMPANY) 25 September 2014; abstract; page 1, lines 25-30; page 2, lines 15-20; page 14, lines 29-31; page 15, lines 1-5, 25-32; page 16, lines 24-25; page 22, lines 10-15, 20-25; page 107, lines 15-22; claim 15	40-50, 53-56, 58-59
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A		51-52



Further documents are listed in the continuation of Box C.



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Date of the actual completion of the international search

17 December 2015 (17.12.2015)

Date of mailing of the international search report

13 MAY 2016

Name and mailing address of the ISA/

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P.O. Box 1450, Alexandria, Virginia 22313-1450

Facsimile No. 571-273-8300

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PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US15/59271

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2014/160967 A2 (BIOMED VALLEY DISCOVERIES, INC) 02 October 2014; paragraphs [0047], [0079], [0096], [0101], [0104], [0121], [0140], [0151]; claim 31	55, 57-58, 60-70, 71/57, 71/60, 71/61, 71/66
Y	US 2008/0039453 A1 (PUTMAN, D et al) 14 February 2008; paragraph [0054], [0175]	27, 31-38
Y	PUBCHEM. CID 57911539. 19 August 2012, pp. 1-11 [online], [retrieved on 2015-12-17]. Retrieved from the Internet <URL: https://pubchem.ncbi.nlm.nih.gov/compound/57911539#section=Top >; page 3	28, 34, 37
Y	WO 2013/079425 A1 (BAYER INTELLECTUAL PROPERTY GMBH) 06 June 2013; page 211, lines 5-10; claims 12, 18	38
A	US 2011/0306644 A1 (HOEKSTRA, WJ et al.) 15 December 2011; paragraph [0081]; claim 21	51-52
A	US 2014/0212444 A1 (THE REGENTS OF THE UNIVERSITY OF MICHIGAN) 31 July 2014; paragraph [0004], [0068]	51