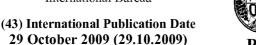
(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau







(10) International Publication Number WO 2009/131947 A3

(51) International Patent Classification: A01N 43/58 (2006.01) **A61K 31/50** (2006.01) A01N 43/60 (2006.01)

(21) International Application Number:

PCT/US2009/041145

(22) International Filing Date:

20 April 2009 (20.04.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

21 April 2008 (21.04.2008) 61/046,752 61/098,528 19 September 2008 (19.09.2008) US

- (71) Applicant (for all designated States except US): INSTI-TUTE FOR ONEWORLD HEALTH [US/US]; 50 California Street, Suite 500, San Francisco, CA 94111 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): RUSSELL, Michael, Geoffrey Neil [GB/GB]; C/o Biofocus DPI, Chesterford Research Park, Saffron Walden, Essex, CB10 1XL (GB). DOYLE, Kevin, James [GB/GB]; C/o Biofocus DPI, Chesterford Research Park, Saffron Walden, Essex, CB10 1XL (GB). PEACH, Joanne [GB/GB]; C/o Biofocus DPI, Chesterford Research Park, Saffron Walden, Essex, CB10 1XL (GB).

- Agents: KONSKI, Antoinette, F. et al.; Foley & Lardner LLP, 975 Page Mill Road, Palo Alto, CA 94304-1013
- (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, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (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, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- (88) Date of publication of the international search report: 7 January 2010



INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 09/41145

			
A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - A01N 43/58, 43/60; A61K 31/50 (2009.01) USPC - 514/247-248 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: 514/247-248			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 514/236.5, 252.01 (see search terms below)			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Electronic Databases Searched: USPTO WEST (USPT, PGPUB, EPABM JPAB), Google Scholar. Search Terms Used: pyridazine derivativ, human or animal, carrier or pharma\$, trea\$ or animal, diarrhea or chemotherap\$, cystic fibrosis, PKD or CFTR			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.
Y	US 4,279,908 A (Jojima et al.) 21 July 1981 (21.07.19) 56; col 3, ln 46	81) col 2, ln 1-50, ln 59-60; col 3, ln 46, ln	1-28
Y	US 4,721,711 A (Chambon et al.) 26 January 1988 (26.01.1988) col 1, ln 15-40; col 3, ln 50		1-28
Y	US 2007/0015780 A1 (Picker et al.) 18 January 2007 (18.01.2007) para [0087]		1-28
Y	US 5,234,922 A (Welsh et al.) 10 August 1993 (10.08.1993) col 1, ln 20-31; col 2, ln 60-68; col 3, ln 4-14; col 4, ln 63-66; col 9, ln 2-20		20-28
		·	
			•
Further documents are listed in the continuation of Box C.			
* Special categories of cited documents: "T" later document published after the international filing date or prio date and not in conflict with the application but cited to underst to be of particular relevance to be of particular relevance."			ation but cited to understand
		"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other		step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be	
"O" document referring to an oral disclosure, use, exhibition or other means		considered to involve an inventive s combined with one or more other such d being obvious to a person skilled in the	tep when the document is ocuments, such combination
"P" document published prior to the international filing date but later than the priority date claimed			
Date of the actual completion of the international search Da		Date of mailing of the international search report	
13 May 2009 (13.05.2009)		20 MAY 2009	
Name and mailing address of the ISA/US		Authorized officer:	
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450		Lee W. Young	
Facility No. 574 070 0004		PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774	

Form PCT/ISA/210 (second sheet) (April 2007)