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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 April 2011 (14.04.2011)

PCT

(10) International Publication Number
WO 2011/044535 A2

(51) International Patent Classification:
C07D 471/04 (2006.01) *A61P 25/18* (2006.01)
C07D 413/14 (2006.01) *A61P 25/28* (2006.01)
C07D 409/14 (2006.01) *A61P 25/24* (2006.01)
A61K 31/519 (2006.01)

(21) International Application Number:
PCT/US2010/052106

(22) International Filing Date:
8 October 2010 (08.10.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/250,262 9 October 2009 (09.10.2009) US
61/353,054 9 June 2010 (09.06.2010) US

(71) Applicant *(for all designated States except US)*: **AFRAXIS, INC.** [US/US]; 5626 Oberlin Drive, San Diego, California 92121 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **VOLLRATH, Benedikt** [DE/US]; 4704 Niagara Avenue, San Diego, California 92107 (US). **CAMPBELL, David** [US/US]; 13318 Seagrove Street, San Diego, California 92130 (US). **DURÓN, Sergio G.** [US/US]; 1605 Neale Street, San Diego, California 92103 (US). **WADE, Warren** [US/US]; 10940 Shy Bird Lane, San Diego, California 92128 (US).

(74) Agents: **WILSON SONSINI GOODRICH & ROSATI** et al.; 650 Page Mill Road, Palo Alto, California 94304 (US).

(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, CL, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

WO 2011/044535 A2

(54) Title: 8-ETHYL-6-(ARYL)PYRIDO[2,3-D]PYRIMIDIN-7(8H)-ONES FOR THE TREATMENT OF CNS DISORDERS

(57) Abstract: Provided herein are PAK inhibitors and methods of utilizing PAK inhibitors for the treatment of CNS disorders such as neuropsychiatric disorders.