

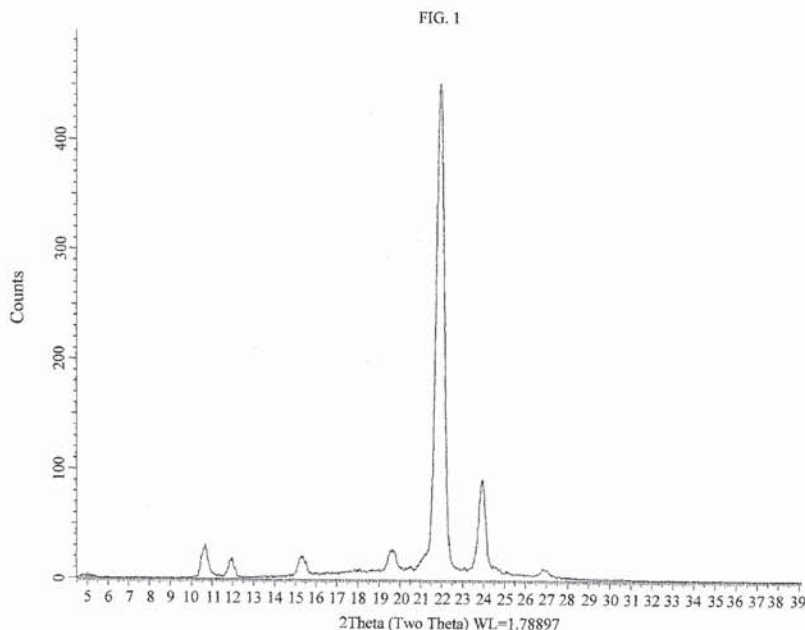


- (51) International Patent Classification:  
A61K 31/519 (2006.01) C07D 491/22 (2006.01)
- (21) International Application Number:  
PCT/US2015/012597
- (22) International Filing Date:  
23 January 2015 (23.01.2015)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
61/931,506 24 January 2014 (24.01.2014) US  
62/049,326 11 September 2014 (11.09.2014) US  
62/106,301 22 January 2015 (22.01.2015) US
- (71) Applicant: TP THERAPEUTICS, INC. [US/US]; 6650 Lusk Boulevard, Suite B107, San Diego, California 92121 (US).

- (72) Inventors: CUI, Jingrong Jean; 6650 Lusk Boulevard, Suite B107, San Diego, California 92121 (US). LI, Yishan; 6650 Lusk Boulevard, Suite B107, San Diego, California 92121 (US). ROGERS, Evan W.; 6650 Lusk Boulevard, Suite B107, San Diego, California 92121 (US). ZHAI, Dayong; 6650 Lusk Boulevard, Suite B107, San Diego, California 92121 (US).
- (74) Agent: LIPTAK, Vincent, P.; Barnes & Thornburg LLP, 11 South Meridian Street, Indianapolis, Indiana 46204 (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, 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, 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,

[Continued on next page]

(54) Title: DIARYL MACROCYCLES AS MODULATORS OF PROTEIN KINASES



(57) Abstract: The present invention relates to certain diaryl macrocyclic compounds, pharmaceutical compositions containing them, and methods of using them, including methods for treating cancer, pain, neurological diseases, autoimmune diseases, and inflammation.



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).

— *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))*

**Declarations under Rule 4.17:**

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