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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
25 August 2011 (25.08.2011)

PCT

(10) International Publication Number
WO 2011/101644 A1

(51) International Patent Classification:
C07D 471/04 (2006.01) *A61P 9/10* (2006.01)
A61K 31/4192 (2006.01) *A61P 29/00* (2006.01)
A61K 31/437 (2006.01) *A61P 25/28* (2006.01)
A61P 35/00 (2006.01) *A61P 31/12* (2006.01)
A61P 19/02 (2006.01) *A61P 33/00* (2006.01)

(21) International Application Number:
PCT/GB2011/000233

(22) International Filing Date:
18 February 2011 (18.02.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10380020.7 18 February 2010 (18.02.2010) EP

(71) Applicant *(for all designated States except US)*: **CENTRO NACIONAL DE INVESTIGACIONES ONCOLOGICAS (CNIO)** [ES/ES]; Melchor Fernández, Almagro 3, E-28029 Madrid (ES).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **PASTOR FERNÁNDEZ, Joaquin** [ES/ES]; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández, Almagro 3, E-28029 Madrid (ES). **OYARZABAL SANTAMARINA, Julen** [ES/ES]; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández, Almagro 3, E-28029 Madrid (ES). **SALUSTE, Carl-Gustaf, Pierre** [SE/ES]; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández, Almagro 3, E-28029 Madrid (ES). **BLANCO APARICIO, Carmen** [ES/ES]; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández, Almagro 3, E-28029 Madrid (ES). **ALVAREZ ESCOBAR, Rosa, María** [ES/ES]; Centro Nacional de Investigaciones Oncologicas (CNIO), Melchor Fernández, Almagro 3, E-28029 Madrid (ES). **RIVERO BUCETA, Virginia** [ES/ES]; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández, Almagro 3, E-28029 Madrid (ES).

(74) Agent: **McNEENEY, Stephen, Phillip**; Potter Clarkson LLP, Park View House, 58 The Ropewalk, Nottingham NG1 5DD (GB).

(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).

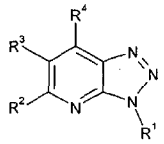
Published:

— *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))*

WO 2011/101644 A1

(54) Title: TRIAZOLO [4, 5 - B] PYRIDIN DERIVATIVES



(I)

(57) Abstract: There is provided compounds of formula (I), wherein R^1, R^2, R^3 and R^4 have meanings given in the description, and pharmaceutically-acceptable esters, amides, solvates or salts thereof, which compounds are useful in the treatment of diseases in which inhibition of a protein or lipid kinase (e.g. a PIM family kinase, such as PIM-1, PIM-2 and/or PIM-3, and/or Flt3) is desired and/or required, and particularly in the treatment of cancer or a proliferative disease.