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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
18 September 2014 (18.09.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/140644 A1

(51) International Patent Classification:
C07D 498/14 (2006.01) *A61P 35/00* (2006.01)
A61K 31/519 (2006.01)

(21) International Application Number:
PCT/GB2014/050825

(22) International Filing Date:
14 March 2014 (14.03.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13382089.4 15 March 2013 (15.03.2013) EP

(71) Applicant: **FUNDACIÓN CENTRO NACIONAL DE INVESTIGACIONES ONCOLÓGICAS CARLOS III** [ES/ES]; Melchor Fernández Almagro 3, Madrid E-28029 (ES).

(72) Inventors: **PASTOR FERNÁNDEZ, Joaquín**; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández Almagro 3, Madrid E-28029 (ES). **FERNÁNDEZ-CAPETILLO RUIZ, Oscar**; Fermin Caballero 56, 3D., Madrid E-28029 (ES). **MARTÍNEZ GONZÁLEZ, Sonia**; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández Almagro 3, Madrid E-28029 (ES). **BLANCO APARICIO, Carmen**; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández Almagro 3, Madrid E-28029 (ES). **RICO FERREIRA, María del Rosario**; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández Almagro 3, Madrid E-28029 (ES). **TOLEDO LÁZARO, Luis Ignacio**; María Zambrano 4, 10D, Zaragoza 50015 (ES). **RODRÍGUEZ ARÍSTEGUÍ, Sonsoles**; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández Almagro 3, Madrid E-28029 (ES). **MURGA COSTA, Matilde**; Fermin Caballero 56, 3D., Madrid E-28029 (ES). **VARELA BUSTO, Carmen**; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández Almagro 3, Madrid E-28029 (ES). **LOPEZ CONTRERAS, Andrés Joaquín**; Martin Lutero King, 22, Molina de Segura (Murcia) 30500 (ES). **RENNER, Oliver**; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández Almagro 3, Madrid E-28029 (ES). **NIETO SOLER, María**; Calle Josep Pla 37, Bajo 2, Mataró 08304, Barcelona (ES). **CEBRIÁN MUÑOZ, David Alvaro**; Centro Nacional de Investigaciones Oncológicas (CNIO), Melchor Fernández Almagro 3, Madrid E-28029 (ES).

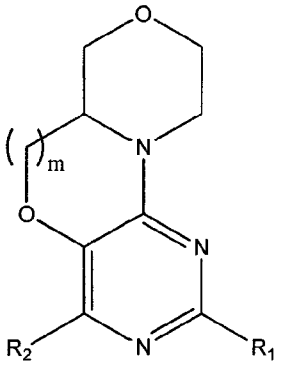
(74) Agent: **MCNEENEY, Stephen Phillip**; Potter Clarkson LLP, The Belgrave Centre, Talbot Street, Nottingham NG1 5GG (GB).

(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, 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, LT, 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, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,

[Continued on next page]

(54) Title: CHEMICAL ENTITIES



(I)

(57) Abstract: Provided are chemical entities selected from compounds of formula (I), wherein R_1, R_2 and m have meanings given in the description, and pharmaceutically acceptable salts, solvates and stereoisomers thereof, which are inhibitors of ATR and are potentially useful in the treatment of cancer. Further provided are pharmaceutical compositions of the chemical entities, combination products containing the chemical entities, the use of the compositions as therapeutic agents, and methods of treatment using these compositions.

WO 2014/140644 A1

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).

Published:

— *with international search report (Art. 21(3))*