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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
15 November 2012 (15.11.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/155066 A2

(51) International Patent Classification:
C07D 487/10 (2006.01) *A61K 31/407* (2006.01)
C07D 413/12 (2006.01) *A61P 35/00* (2006.01)

(21) International Application Number:
PCT/US2012/037570

(22) International Filing Date:
11 May 2012 (11.05.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/484,986 11 May 2011 (11.05.2011) US

(72) Inventors; and
(71) Applicants : **WANG, Shaomeng** [US/US]; 9343 Yorkshire Drive, Saline, Michigan 48176 (US). **SUN, Wei** [CN/US]; 1020 Island Drive Court, Apt. 106, Ann Arbor, Michigan 48105 (US). **AGUILAR, Angelo** [BZ/US]; 2364 Stone Road, Ann Arbor, Michigan 48105 (US). **GARCIA-ECHEVERRIA, Carlos** [ES/FR]; c/o Sanofi, 54, rue La Boetie, F-75008 Paris (FR).

(74) Agent: **GOETZ, Robert A.**; Casimir Jones SC, 2275 Deming Way, Suite 310, Middleton, Wisconsin 53562 (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, QA, RO, RS, RU, RW, 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, 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:

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

WO 2012/155066 A2

(54) Title: SPIRO-OXINDOLE MDM2 ANTAGONISTS

(57) Abstract: Provided herein are compounds, compositions, and methods in the field of medicinal chemistry. The compounds and compositions provided herein relate to spiro oxindoles which function as antagonists of the interaction between p53 and MDM2, and their use as therapeutics for the treatment of cancer and other diseases.