

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
29 September 2011 (29.09.2011)

PCT

(10) International Publication Number
WO 2011/119345 A3

(51) International Patent Classification:

C07D 295/112 (2006.01) **A61K 31/451** (2006.01)
C07D 295/195 (2006.01) **A61K 31/495** (2006.01)
C07D 417/04 (2006.01) **A61K 31/18** (2006.01)
C07D 211/58 (2006.01) **A61P 35/00** (2006.01)
C07C 311/51 (2006.01)

(21) International Application Number:

PCT/US2011/027895

(22) International Filing Date:

10 March 2011 (10.03.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/317,575 25 March 2010 (25.03.2010) US

(71) Applicant (for all designated States except US): **ABBOTT LABORATORIES** [US/US]; 100 Abbott Park Road, Abbott Park, Illinois 60064 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DING, Hong** [CN/US]; 9 Mayfair Lane, Lincolnshire, Illinois 60069 (US). **ELMORE, Steven** [US/US]; 2139 Ash Lane, Northbrook, Illinois 60062 (US). **HEXAMER, Laura** [US/US]; 439 Gatewood Lane, Grayslake, Illinois 60030 (US). **KUNZER, Aaron, R.** [US/US]; 615 W. Burr Oak Drive, Arlington, Illinois 60004 (US). **PARK, Cheol-Min** [US/SG]; 37 Nanyang View, Singapore 637371 (SG). **SOUERS, Andrew, J.** [US/US]; 901 Hinman, Apt. 3A, Evanston, Illinois 60202 (US). **SULLIVAN, Gerard** [US/US]; 1212 Tulip Tree Court, Lake Villa, Illinois 60046 (US). **WENDT, Michael** [US/US]; 1445 Maidstone Drive, Vernon Hills, Illinois 60061 (US).

(74) Agent: **MANZARI, Oona, A.**; 100 Abbott Park Road, AP6A-1/D0377, Abbott Park, Illinois 60064 (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).

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))

(88) Date of publication of the international search report:

22 December 2011

(54) Title: APOPTOSIS-INDUCING AGENTS FOR THE TREATMENT OF CANCER AND IMMUNE AND AUTOIMMUNE DISEASES

(57) Abstract: Disclosed are compounds which inhibit the activity of anti-apoptotic Bcl-2 proteins, compositions containing the compounds and methods of treating diseases during which is expressed anti apoptotic Bcl-2 protein.



WO 2011/119345 A3