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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
4 November 2010 (04.11.2010)

PCT

(10) International Publication Number
WO 2010/127193 A1

(51) International Patent Classification:
A61K 9/00 (2006.01) *A61K 47/14* (2006.01)
A61K 31/5377 (2006.01) *A61K 47/20* (2006.01)
A61K 47/00 (2006.01) *A61K 9/48* (2006.01)
A61K 47/02 (2006.01)

(21) International Application Number:
PCT/US2010/033075

(22) International Filing Date:
30 April 2010 (30.04.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/174,299 30 April 2009 (30.04.2009) US
61/289,254 22 December 2009 (22.12.2009) 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)*: **CATRON, Nathaniel** [US/US]; 305 Lakeside Drive, Vernon Hills, Illinois 60061 (US). **FICKES, Michael** [US/US]; 2311 Ridgeway Avenue, Evanston, Illinois 60201 (US). **FISCHER, Cristina** [US/US]; 2821 North Augusta Drive, Wadsworth, Illinois 60083 (US). **HAIGHT, Anthony R.** [US/US]; 40381 Reed Court, Wadsworth, Illinois 60083 (US). **HEEMSTRA, Katherine** [US/US]; 641 West Grand Avenue, Apt. 4, Chicago, Illinois 60654 (US). **SANZGIRI, Yeshwant** [US/US]; 1323 Deer Run, Gurnee, Illinois 60031 (US). **SCHMITT, Eric** [US/US]; 319 Evergreen Court, Libertyville, Illinois 60048 (US). **TONG, Ping** [CN/US]; 6152 Indian Trail, Gurnee, Illinois 60031 (US). **ZHANG, Geoff** [CN/US]; 1014 Dawes Street, Libertyville, Illinois 60048 (US). **ZHOU, Deliang** [CN/US]; 107 Alexandria Drive, Vernon Hills, Illinois 60061 (US).

(74) Agents: **COLEMAN JAMES, Patricia** et al.; Abbott Laboratories, Dept. 0377, Bldg. AP6A-1A, 100 Abbott Park Road, Abbott Park, Illinois 60064-6008 (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 (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, 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 2010/127193 A1

(54) **Title**: STABILIZED LIPID FORMULATION OF APOPTOSIS PROMOTER

(57) **Abstract**: An orally deliverable pharmaceutical composition comprises a Bcl-2 family protein inhibitory compound, e.g., ABT-263, a heavier-chalcogen antioxidant and a substantially non-aqueous lipid carrier, wherein said compound and said antioxidant are in solution in the carrier. The composition is suitable for oral administration to a subject in need thereof for treatment of a disease characterized by overexpression of one or more anti-apoptotic Bcl-2 family proteins, for example cancer.