



(51) International Patent Classification:

C07D 243/24 (2006.01) **C07D 419/06** (2006.01)
C07D 267/14 (2006.01) **C07D 471/04** (2006.01)
C07D 291/08 (2006.01) **C07D 487/04** (2006.01)
C07D 403/06 (2006.01) **C07D 498/04** (2006.01)
C07D 413/06 (2006.01) **A61K 31/5513** (2006.01)
C07D 413/12 (2006.01) **A61K 31/553** (2006.01)
C07D 413/14 (2006.01) **A61K 31/554** (2006.01)

(21) International Application Number:

PCT/US2012/045086

(22) International Filing Date:

29 June 2012 (29.06.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/503,980 1 July 2011 (01.07.2011) US
 61/582,160 30 December 2011 (30.12.2011) US

(71) **Applicant** (for all designated States except US): **GILEAD SCIENCES, INC.** [US/US]; 333 Lakeside Drive, Foster City, California 94404 (US).

(72) **Inventors; and**

(75) **Inventors/Applicants** (for US only): **CORKEY, Britton Kenneth** [US/US]; 243 Harrison Avenue, Redwood City, California 94062 (US). **ELZEIN, Elfatih** [US/US]; 4644 Creekwood Drive, Fremont, California 94555 (US). **JIAN-ANG, Robert H.** [CN/US]; 8057 Park Villa Circle, Cupertino, California 95014 (US). **KALLA, Rao V.** [IN/US]; 125 Connemara Way, #9, Sunnyvale, California 94087 (US). **KOLTUN, Dmitry** [US/US]; 1075 Grebe Street, Foster City, California 94404 (US). **LI, Xiaofen** [CN/US]; 161 Montelena Court, Mountain View, California 94040 (US). **MARTINEZ, Ruben** [US/US]; 128 37th Avenue, San Mateo, California 94403 (US). **PARKHILL, Eric Q.** [US/US]; 1392 Funston Avenue, Apt. 2, San Francisco, California 94122 (US). **PERRY, Thao** [US/US]; 5109

Adair Way, San Jose, California 95124 (US). **ZAB-LOCKI, Jeff** [US/US]; 490 Raquel Court, Los Altos, California 94022 (US). **VENKATARAMANI, Chandrasekar** [IN/US]; 1 Chart Lane, Redwood City, California 94065 (US). **GRAUPE, Michael** [AT/US]; 1131 Banyan Way, Pacifica, California 94044 (US). **GUERRERO, Juan** [US/US]; 2380 Saint George Drive, Concord, California 94520 (US).

(74) **Agents:** **TANNER, Lorna L.** et al.; Foley & Lardner LLP, 975 Page Mill Road, Palo Alto, California 94304 (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).

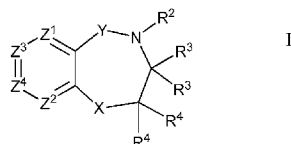
Declarations under Rule 4.17:

— as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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

(54) **Title:** FUSED BENZOXAZEPINONES AS ION CHANNEL MODULATORS



(57) **Abstract:** The present disclosure relates to compounds that are sodium channel inhibitors and to their use in the treatment of various disease states, including cardiovascular diseases and diabetes. In particular embodiments, the structure of the compounds is given by Formula I: wherein Z¹, Z², Z³, Z⁴, X, Y, R², R³ and R⁴ are as described herein, to methods for the preparation and use of the compounds and to pharmaceutical compositions containing the same.