



- (51) **International Patent Classification:**
A61K 31/44 (2006.01)
- (21) **International Application Number:**
PCT/US2014/068152
- (22) **International Filing Date:**
2 December 2014 (02.12.2014)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/910,838 2 December 2013 (02.12.2013) US
- (71) **Applicant:** CHEMOCENTRYX, INC. [US/US]; 850 Maude Avenue, Mountain View, CA 94043 (US).
- (72) **Inventors:** DAIRAGHI, Daniel; 178 El Dorado, Palo Alto, CA 94306 (US). DRAGOLI, Dean, R.; 24645 Summerhill Ave., Los Altos, CA 94024 (US). KALISIAK,

Jarek; 1031 Crestview Drive, Apt. 104, Mountain View, CA 94040 (US). LANGE, Christopher, W.; 6818 Cutting Blvd., El Cerrito, CA 94530 (US). LELETI, Manmohan, Reddy; 7269 Ventana Drive, Sunnyvale, CA 95129 (US). LI, Yandong; 11812 Helmer Lane, San Diego, CA 92131 (US). LUI, Rebecca, M.; 3901 Lick Mill Blvd., #346, Santa Clara, CA 95054 (US). MALI, Venkat, Reddy; 20800 Valley Green Drive, #427, Cupertino, CA 95014 (US). MALATHONG, Viengkham; 1221 Judson Street, Belmont, CA 94002 (US). POWERS, Jay, P.; 745 Rockaway Beach Avenue, Pacifica, CA 94044 (US). TANAKA, Hiroko; 815 Catamaran Street, #1, Foster City, CA 94404 (US). TAN, Joanne; 410 Bartlett Street, Apt. 15, San Francisco, CA 94110 (US). WALTERS, Matthew, J.; 12 Duran Court, Pacifica, CA 94044 (US). YANG, Ju; 966 Clara Drive, Palo Alto, CA 94303 (US). ZHANG, Penglie; 1036 Jamaica St., Foster City, CA 94404 (US).

[Continued on next page]

(54) Title: CCR6 COMPOUNDS

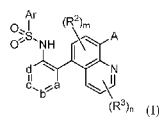


FIG. 1A

TABLE 1: Compound Potency in the LL-2 CCR6 Binding Assay

Number	Structure	Potency	Number	Structure	Potency
1.001		++	1.010		++
1.002		+	1.011		+
1.003		++	1.012		+
1.004		+	1.013		++
1.005		+	1.014		+
1.006		+	1.015		+
1.007		+	1.016		+
1.008		+	1.017		+
1.009		+	1.018		+

(57) **Abstract:** Compounds of formula (I) are provided which are useful in the treatment of diseases or conditions modulated at least in part by CCR6. Pharmaceutical compositions of the compounds of formula (I) are also provided. Further provided in the present disclosure preparative methods for the synthesis of compounds of formula (I), as well as selected intermediates useful in the preparation.



(74) **Agents:** KEZER, William, B. et al.; Kilpatrick Townsend and Stockton LLP, Two Embarcadero Center, Eighth Floor, San Francisco, CA 94111 (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, 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, 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, ST, 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, KM, ML, MR, NE, SN, TD, TG).

Published:

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