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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
8 February 2001 (08.02.2001)

PCT

(10) International Publication Number
WO 01/09138 A2

(51) International Patent Classification[7]: C07D 491/044, A61K 31/4353, 31/4365, 31/55, 31/451, A61P 29/00, C07D 409/06, 401/06, 211/52, 405/06, 471/04, 519/00, 495/04 // (C07D 491/044, 313:00, 221:00) (C07D 471/04, 223:00, 221:00) (C07D 495/04, 337:00, 221:00) (C07D 519/00, 491:00, 491:00)

(21) International Application Number: PCT/US00/20732

(22) International Filing Date: 28 July 2000 (28.07.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/362,837 28 July 1999 (28.07.1999) US

(71) Applicants: **MILLENNIUM PHARMACEUTICALS, INC.** [US/US]; 75 Sidney Street, Cambridge, MA 02139 (US). **KYOWA HAKKO KOGYO CO., LTD.** [JP/JP]; 1-6-1 Ohtemachi, Chiyoda-ku, Tokyo 100-8185 (JP).

(72) Inventors: **LULY, Jay, R.**; 24 Damien Road, Wellesley, MA 02481 (US). **NAKASATO, Yoshisuke**; 80-1 Shimotogari, Nagaizumi-cho, Sunto-gun, Shizuoka 411 (JP). **OHSHIMA, Etsuo**; 2-223 Edogawadai-Nishi, Nagareyama-shi, Chiba 270-0115 (JP). **SONE, Hiroki**; 1188 Shimotogari, Nagizumi-cho, Sunto-gun, Shizuoka 411 (JP). **KOTERA, Osamu**; 1188 Shimotogari, Nagaizumi-cho, Sunto-gun, Shizuoka 411 (JP). **HARRIMAN, Geraldine, C., B.**; 50 South Arnold Road, Charlestown, RI 02813 (US). **CARSON, Kenneth, G.**; 22 Alfreton Road, Needham, MA 02494 (US).

(74) Agents: **CARROLL, Alice, O.** et al.; Hamilton, Brook, Smith & Reynolds, P.C., Two Militia Drive, Lexington, MA 02421 (US).

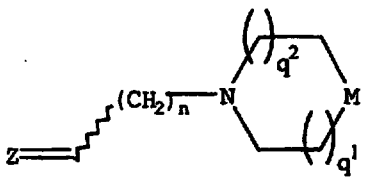
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

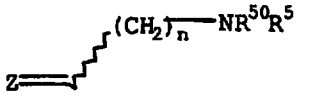
Published:
— *Without international search report and to be republished upon receipt of that report.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CHEMOKINE RECEPTOR ANTAGONISTS AND METHODS OF USE THEREFOR



(I)



(II)

(57) Abstract: Disclosed are novel compounds and a method of treating a disease associated with aberrant leukocyte recruitment and/or activation. The method comprises administering to a subject in need an effective amount of a compound represented by (I) or (II) and physiologically acceptable salts thereof.

WO 01/09138 A2