

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 January 2008 (03.01.2008)

PCT

(10) International Publication Number
WO 2008/000409 A1

(51) International Patent Classification:

A61K 31/166 (2006.01) C07D 215/24 (2006.01)
A61P 29/00 (2006.01) C07D 333/64 (2006.01)
C07C 235/66 (2006.01) C07D 213/30 (2006.01)

Rosy [US/US]; Bridgewater, New Jersey 08807 (US).
SHIMSHOCK, Stephen [US/US]; Hillsborough, NJ
08844 (US). WEICHSEL, Aleksandra [US/US]; Tucson,
AZ 85737 (US).

(21) International Application Number:

PCT/EP2007/005576

(74) Agent: LÖSCHNER, Thomas; c/o Sanofi-Aventis
Deutschland GmbH, Patents Germany, Industriepark
Höchst, Geb. K 801, 65926 Frankfurt am Main (CH).

(22) International Filing Date: 25 June 2007 (25.06.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

06013323.8 28 June 2006 (28.06.2006) EP

(71) Applicant (for all designated States except US): SANOFI-
AVENTIS [FR/FR]; 174 avenue de France, F-75013 Paris
(FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HACHTEL,
Stephanie [DE/DE]; c/o Sanofi-Aventis Deutschland
GmbH, 65926 Frankfurt am Main (DE). DEDIO, Juergen
[DE/DE]; c/o Sanofi-Aventis Deutschland GmbH,
65926 Frankfurt am Main (DE). DEFOSSA, Elisa-
beth [DE/DE]; c/o Sanofi-Aventis Deutschland GmbH,
65926 Frankfurt am Main (DE). GRUENEBERG, Sven
[DE/DE]; c/o Sanofi-Aventis Deutschland GmbH, 65926
Frankfurt am Main (DE). HEITSCH, Holger [DE/DE];
c/o Sanofi-Aventis Deutschland GmbH, 65926 Frankfurt
am Main (DE). BOCK, William [US/US]; Oro Valley,
Arizona 85755 (US). CHEN, Charlie [US/US]; Tucson,
Arizona 85737 (US). KOSLEY, Raymond [US/US];
Bridgewater, New Jersey 08807 (US). KUNG, Chung-Yi
[US/US]; Tucson, Arizona 85737 (US). PATEK, Mar-
cel [US/US]; Tucson, Arizona 85704 (US). SHER,

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH,
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, PG, PH, PL,
PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA,
ZM, ZW.

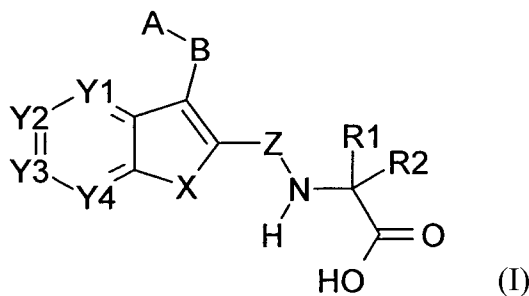
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,
PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

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

(54) Title: NEW CXCR2 INHIBITORS



(57) Abstract: The invention relates to compounds of the for-
mula (I), in which R1, R2, X, A, B, Z and Y1 to Y4 have the
meanings indicated in the claims, and/or a pharmaceutically ac-
ceptable salt and/or a prodrug thereof. Because of their proper-
ties as inhibitors of chemokine receptors, especially as CXCR2
inhibitors, the compounds of the formula I and the pharmaceu-
tically acceptable salts and prodrugs thereof are suitable for the
prevention and treatment of chemokine mediated diseases.