

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
22 November 2007 (22.11.2007)

PCT

(10) International Publication Number
WO 2007/131350 A1

(51) International Patent Classification:

C07D 311/08 (2006.01) A61P 31/18 (2006.01)
A61K 31/352 (2006.01) C07D 215/22 (2006.01)
A61K 31/47 (2006.01)

2100 Cunard Street, Laval, Québec H7S 2G5 (CA).
MASON, Stephen [CA/CA]; 2100 Cunard Street, Laval,
Québec H7S 2G5 (CA). **PESANT, Marc** [CA/CA]; 2100
Cunard Street, Laval, Québec H7S 2G5 (CA).

(21) International Application Number:

PCT/CA2007/000845

(74) Agent: **LOOPER, Ywe, J.**; c/o Boehringer Ingelheim
(Canada) Ltd., 2100 Cunard Street, Laval, Québec H7S
2G5 (CA).

(22) International Filing Date: 14 May 2007 (14.05.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/747,311 16 May 2006 (16.05.2006) US

(71) Applicant (for all designated States except DE, US):
BOEHRINGER INGELHEIM INTERNATIONAL
GmbH [DE/DE]; Binger Strasse 173, 55216 Ingelheim
(DE).

(71) Applicant (for DE only): **BOEHRINGER INGELHEIM**
PHARMA GmbH & Co KG [DE/DE]; Binger Strasse
173, 55216 Ingelheim (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **TSANTRIZOS,**
Youla, S. [CA/CA]; 2100 Cunard Street, Laval, Quebec
H7S 2G5 (CA). **BOES, Michael** [AT/DE]; Tengstrasse
40, 80796 Munich (DE). **BROCHU, Christian** [CA/CA];
2100 Cunard Street, Laval, Québec H7S 2G5 (CA).
FENWICK, Craig [CA/CA]; 2100 Cunard Street, Laval,
Québec H7S 2G5 (CA). **MALENFANT, Eric** [CA/CA];

(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, 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.

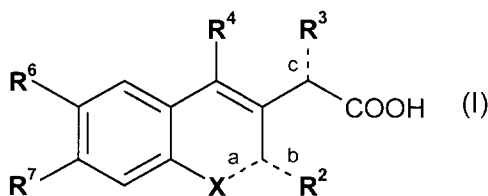
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, 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: INHIBITORS OF HUMAN IMMUNODEFICIENCY VIRUS REPLICATION



(57) Abstract: The invention relates to compounds of formula (I) their derivatives comprising a detectable label, their compositions and their use in the treatment of human immunodeficiency virus (HIV) infection. In particular, the invention provides novel inhibitors of HIV replication, pharmaceutical compositions containing such compounds and methods for using these compounds in the treatment of HIV infection.