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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number
WO 2005/040142 A1

(51) International Patent Classification[7]: C07D 271/06, A61K 31/5377, A61P 35/00, C07D 271/10, 261/08, 413/04, 263/32, 263/56, 295/18, A61P 29/00, 37/00

(21) International Application Number: PCT/US2004/035282

(22) International Filing Date: 22 October 2004 (22.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/514,373 24 October 2003 (24.10.2003) US

(71) Applicant *(for all designated States except US)*: **AVENTIS PHARMACEUTICALS INC.** [US/US]; 300 Somerset Corporate Boulevard, Bridgewater, New Jersey 08807-2854 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **THURAIRATNAM, Sukanthini** [GB/US]; 6 Smoke Rise Lane, Bedminster, NJ 07921 (US). **ALDOUS, David, John** [US/US]; 268 Gates Avenue, Gillette, NJ 07933 (US). **LEROY, Vincent** [FR/US]; 1 JFK Boulevard, Franklin Greens Apt #36K, Somerset, NJ 08873 (US). **TIMM, Andreas, Paul** [DE/US]; 97 Bonney Court, Bridgewater, New Jersey 08807 (US).

(74) Agents: **LIN, Jiang** et al.; Aventis Pharmaceuticals Inc., Route 202-206, Bridgewater, NJ 08807 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, 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, 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, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, IT, LU, MC, 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).

Declarations under Rule 4.17:
— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*
— *of inventorship (Rule 4.17(iv)) for US only*

Published:
— *with international search report*

(48) Date of publication of this corrected version: 9 June 2005

(15) Information about Correction:
see PCT Gazette No. 23/2005 of 9 June 2005, Section II

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: NOVEL KETO-OXADIAZOLE DERIVATIVES AS CATHEPSIN INHIBITORS

(57) Abstract: Novel difluorinated amide derivatives of Formula (II) as inhibitors of cathepsin S, K, B, and L, the pharmaceutically acceptable salts and *N*-oxides thereof, their uses as therapeutic agents and the methods of their making.

WO 2005/040142 A1