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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 May 2009 (14.05.2009)

PCT

(10) International Publication Number
WO 2009/059666 A1

(51) International Patent Classification:
*C07D 471/04* (2006.01) *A61P 25/00* (2006.01)
*A61K 31/33* (2006.01)

(21) International Application Number:
PCT/EP2008/008309

(22) International Filing Date: 1 October 2008 (01.10.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
07291325.4 5 November 2007 (05.11.2007) EP

(71) Applicant *(for all designated States except US)*: **MERCK PATENT GMBH** [DE/DE]; Frankfurter Strasse 250, 64293 Darmstadt (DE).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **CARNIATO, Denis** [FR/FR]; 33, avenue du Marechal de Lattre de Tassigny, F-91460 Marcoussis (FR). **SCHULTZ, Melanie** [DE/DE]; Heinrich-Fuhr-Strasse 17, 64287 Darmstadt (DE). **ROCHE, Didier** [FR/FR]; 1, rue Chateaubriand, F-91400 Saclay (FR). **HALLAKOU-BOZEC, Sophie** [FR/FR]; 166 avenue Henri Ginoux, F-92120 Montrouge (FR).

(74) Common Representative: **MERCK PATENT GMBH**; Frankfurter Strasse 250, 64293 Darmstadt (DE).

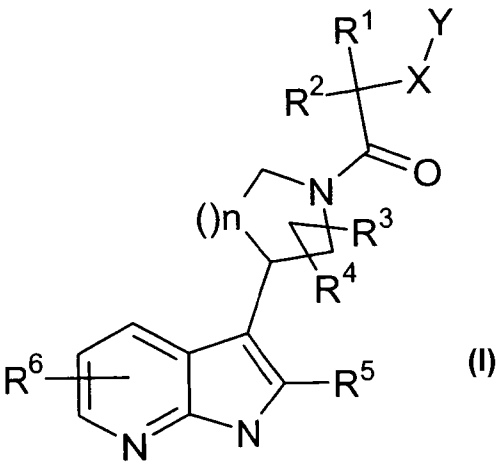
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, 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, ST, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, 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*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(54) **Title:** 7-AZAINDOLE DERIVATIVES AS SELECTIVE 11-BETA-HYDROXYSTEROID DEHYDROGENASE TYPE 1 INHIBITORS

(57) **Abstract:** The present invention relates to 7-azaindole derivatives of formula (I) as selective inhibitors of the enzyme 11-beta-hydroxysteroid dehydrogenase type 1 (11 β-HSD-1 ) and the use of such compounds for the treatment and prevention of metabolic syndrome, diabetes, insulin resistance, obesity, lipid disorders, glaucoma, osteoporosis, cognitive disorders, anxiety, depression, immune disorders, hypertension and other diseases and conditions.




(I)

WO 2009/059666 A1