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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
6 August 2009 (06.08.2009)

PCT

(10) International Publication Number
WO 2009/095787 A1

(51) International Patent Classification:
C07D 498/04 (2006.01) *A61K 31/33* (2006.01)
C07D 519/00 (2006.01) *A61P 25/00* (2006.01)

(21) International Application Number:
PCT/IB2009/000293

(22) International Filing Date: 27 January 2009 (27.01.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
08290077.0 29 January 2008 (29.01.2008) EP

(71) Applicants *(for all designated States except US)*: **SANOFI-AVENTIS** [FR/FR]; 174 avenue de France, F-75013 Paris (FR). **MITSUBISHI TANABE PHARMA CORPORATION** [JP/JP]; 2-10, Dosho-machi 3-chome-Chuo-ku, Osaka-shi, Osaka 541-8505 (JP).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **FAYOL, Aude** [FR/FR]; Patent Department, c/o Sanofi-Aventis, 174 avenue de France, F-75013 Paris (FR). **LOCHEAD, Alistair** [GB/FR]; Patent Department, c/o Sanofi-Aventis, 174 avenue de France, F-75013 Paris (FR). **SAADY, Mourad** [FR/FR]; Patent Department, c/o Sanofi-Aventis, 174 avenue de France, F-75013 Paris (FR). **VACHE, Julien** [FR/FR]; Patent Department, c/o Sanofi-Aventis, 174 avenue de France, F-75013 Paris (FR). **YAICHE, Philippe** [FR/FR]; Patent Department, c/o Sanofi-Aventis, 174 avenue de France, F-75013 Paris (FR).

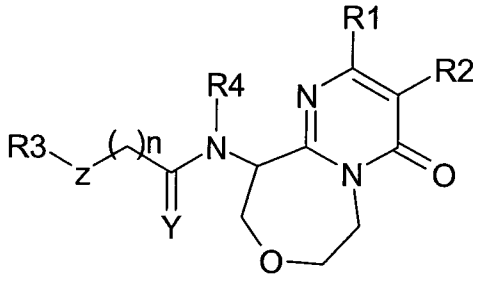
(74) Agent: **MOREL-PECHEUX, Muriel**; Sanofi-Aventis, Patent Department, 174 avenue de France, F-75013 Paris (FR).

(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, MK, 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*

(54) Title: SUBSTITUTED HETEROARYLAMIDE OXAZEPINOPYRIMIDONE DERIVATIVES



(I)

(57) Abstract: A pyrimidone derivative represented by Formula (I) or a salt thereof, or a solvate thereof or a hydrate thereof: Formula (I) wherein: Y represents two hydrogen atoms, a sulphur atom, an oxygen atom or a C_{1-2} alkyl group and a hydrogen atom; Z represents a bond, an oxygen atom, a nitrogen atom substituted by a hydrogen atom or a C_{1-3} alkyl group, a sulphur atom, a methylene group optionally substituted by one or two groups chosen from a Ci-6 alkyl group, a hydroxyl group, a C_{1-6} alkoxy group, a C_{1-2} perhalogenated alkyl group or an amino group; R1 represents a 2, 3 or 4-pyridine ring or a 2, 4 or 5-pyrimidine ring, the ring being optionally substituted by a C_{1-6} alkyl group, a C_{1-6} alkoxy group or a halogen atom; R2 represents a hydrogen atom, a C_{1-6} alkyl group or a halogen atom; R3 represents a 4-15 membered heterocyclic group, this group being optionally substituted; R4 represents a hydrogen atom or a C_{1-6} alkyl group; and n represents 0 to 3 and their therapeutic use.

WO 2009/095787 A1