



(51) International Patent Classification:

A61K 31/4709 (2006.01) **C07D 217/14** (2006.01)
C07D 207/14 (2006.01) **A61P 7/02** (2006.01)

(21) International Application Number:

PCT/EP2012/076224

(22) International Filing Date:

19 December 2012 (19.12.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

11306733.4 21 December 2011 (21.12.2011) EP

(71) Applicant: **SANOFI** [FR/FR]; 54, rue La Boétie, F-75008 Paris (FR).

(72) Inventors: **ALET, Nathalie**; c/o Sanofi, Patent Department, 54 rue la Boétie, F-75008 Paris (FR). **ALTENBURGER, Jean-Michel**; c/o Sanofi, Patent Department, 54 rue la Boétie, F-75008 Paris (FR). **HERAULT, Jean-Pascal**; c/o Sanofi, Patent Department, 54 rue la Boétie, F-75008 Paris (FR). **KIRSCH, Reinhard**; c/o Sanofi, Patent Department, 54 rue la Boétie, F-75008 Paris (FR). **LAS-SALLE, Gilbert**; c/o Sanofi, Patent Department, 54 rue la Boétie, F-75008 Paris (FR). **MALLART, Sergio**; c/o Sanofi, Patent Department, 54 rue la Boétie, F-75008 Paris (FR). **PHILIPPO-ORTS, Marie-Claire**; c/o Sanofi, Patent Department, 54 rue la Boétie, F-75008 Paris (FR).

(74) Agents: **DOMENEGO, Bertrand** et al.; Cabinet Lavoix, 2, place d'Estienne d'Orves, F-75009 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, BN, BR, BW, BY, BZ, CA, CH, CL, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, 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, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: SULPHONYLAMINOPYRROLIDINONE DERIVATIVES, THEIR PREPARATION AND THEIR THERAPEUTIC APPLICATION

(57) Abstract: The invention relates to new sulphonylaminopyrrolidinone compounds having antithrombotic activity which, in particular, inhibit blood clotting factor IXa and/ or factor Xa, to processes for their preparation and to use thereof as drugs.



WO 2013/092756 A1