

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 June 2009 (18.06.2009)

PCT

(10) International Publication Number
WO 2009/074300 A8

- (51) **International Patent Classification:**
C07D 235/18 (2006.01) C07D 413/12 (2006.01)
C07D 405/12 (2006.01) A61K 31/4184 (2006.01)
C07D 401/12 (2006.01) A61P 3/14 (2006.01)
C07D 403/12 (2006.01) A61P 35/00 (2006.01)
- (21) **International Application Number:**
PCT/EP2008/010470
- (22) **International Filing Date:**
10 December 2008 (10.12.2008)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
07024218.5 13 December 2007 (13.12.2007) EP
- (71) **Applicant (for all designated States except US):** SIENA BIOTECH S.P.A. [IT/IT]; Strada del Petriccio e Belriguardo, 35, I-53100 Siena (IT).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** THOMAS, Russell John [GB/IT]; c/o Siena Biotech S.p.A., Strada del Petriccio e Belriguardo, 35, I-53100 Siena (IT). PERICOT MOHR, Galia [ES/IT]; c/o Siena Biotech S.p.A., Strada del Petriccio e Belriguardo, 35, 53100 Siena (IT). MINETTO, Giacomo [IT/IT]; c/o Siena Biotech S.p.A., Strada del Petriccio e Belriguardo, 35, I-53100 Siena (IT). BAKKER, Annette Cornelia [BE/IT]; c/o Siena Biotech S.p.A., Strada del Petriccio e Belriguardo, 35, I-53100 Siena (IT). FERRUZZI, Pietro [IT/IT]; c/o Siena Biotech S.p.A., Strada del Petriccio e Belriguardo, 35, I-53100 Siena (IT).
- (74) **Agents:** BANFI, Paolo et al.; Bianchetti Bracco Minoja S.r.L., Via Plinio, 63, I-20129 Milano (IT).
- (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 (Art. 21(3))
- (88) **Date of publication of the international search report:**
1 October 2009
- (48) **Date of publication of this corrected version:**
19 November 2009
- (15) **Information about Correction:**
see Notice of 19 November 2009



WO 2009/074300 A8

(54) **Title:** HEDGEHOG PATHWAY ANTAGONISTS AND THERAPEUTIC APPLICATIONS THEREOF

(57) **Abstract:** Heterocyclic compounds that modulate the hedgehog signaling pathway, pharmaceutical composition thereof and their therapeutic applications.