



- (51) **International Patent Classification:**
C07D 473/16 (2006.01) *A61P 35/00* (2006.01)
A61K 31/52 (2006.01)
- (21) **International Application Number:**
PCT/CZ2014/000014
- (22) **International Filing Date:**
5 February 2014 (05.02.2014)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
PV 2013-88 8 February 2013 (08.02.2013) CZ
- (71) **Applicants:** **UNIVERZITA PALACKEHO V OLOMOUCI** [CZ/CZ]; Krizkovskeho 7, 77200 Olomouc (CZ). **BIOPATTERNS S.R.O.** [CZ/CZ]; Slechtitelu 813/21, 77900 Olomouc, Holic (CZ).
- (72) **Inventors:** **GUCKY, Tomas**; Mladejovice 117, 78501 Mladejovice (CZ). **JORDA, Radek**; Zelena 5, 77900 Olomouc (CZ). **ZATLOUKAL, Marek**; Revolucni 18a, 78701 Sumperk (CZ). **KRYSTOF, Vladimir**; Varsavske nam. 1099/7, 77900 Olomouc (CZ). **RAROVA, Lucie**; Prchalov 98, 74258 Pribor (CZ). **REZNICKOVA, Eva**; Foerstrova 13, 77900 Olomouc (CZ). **MIKULITS, Wolfgang**; Bergmiller-Gasse 6/41, A-1140 Wien (AT). **STRNAD, Miroslav**; Zapadni 25, 77900 Olomouc (CZ).
- (74) **Agent:** **HARTVICOVA, Katerina**; Inventia s.r.o., Na Belidle 3, 15000 Praha 5 (CZ).

- (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, IR, IS, JP, KE, KG, 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, SA, 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, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

- (88) **Date of publication of the international search report:**
16 October 2014

(54) **Title:** 2-SUBSTITUTED-6-BIARYLMETHYLAMINO-9-CYCLOPENTYL-9H-PURINE DERIVATIVES, USE THEREOF AS MEDICAMENTS, AND PHARMACEUTICAL COMPOSITIONS

(57) **Abstract:** This invention relates to novel 2-substituted-6-biaryl-methylamino-9-cyclopentyl-9H-purine derivatives, showing activity as specific inhibitors of growth and angiogenesis of hepatocellular carcinoma. The invention further includes pharmaceutical compositions containing the 2-substituted-6-biaryl-methylamino-9-cyclopentyl-purines.

