



(51) International Patent Classification:

C07D 473/18 (2006.01) **A61P 37/00** (2006.01)
C07D 473/16 (2006.01) **A61P 35/00** (2006.01)
A61K 31/522 (2006.01)

(21) International Application Number:

PCT/EP2009/060265

(22) International Filing Date:

7 August 2009 (07.08.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/087,777 11 August 2008 (11.08.2008) US

(71) Applicant (for all designated States except US):

SMITHKLINE BEECHAM CORPORATION
 [US/US]; One Franklin Plaza, Po Box 7929, Philadelphia,
 Pennsylvania 19101 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BIGGADIKE, Keith** [GB/GB]; GlaxoSmithKline, Gunnels Wood Road, Stevenage Hertfordshire SG1 2NY (GB). **COE, Diane, Mary** [GB/GB]; GlaxoSmithKline, Gunnels Wood Road, Stevenage Hertfordshire SG1 2NY (GB). **LEWELL, Xiao, Qing** [GB/GB]; GlaxoSmithKline, Gunnels Wood Road, Stevenage Hertfordshire SG1 2NY (GB).

MITCHELL, Charlotte, Jane [GB/GB]; GlaxoSmithKline, Gunnels Wood Road, Stevenage Hertfordshire SG1 2NY (GB). **SMITH, Stephen, Allan** [GB/GB]; GlaxoSmithKline, Gunnels Wood Road, Stevenage Hertfordshire SG1 2NY (GB). **TRIVEDI, Naimisha** [GB/GB]; GlaxoSmithKline, Gunnels Wood Road, Stevenage Hertfordshire SG1 2NY (GB).

(74) Agents: **POVEY, Alexander, William, George** et al.; GlaxoSmithKline, Corporate Intellectual Property (CN925.1), 980 Great West Road, Brentford Middlesex TW8 9GS (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available):

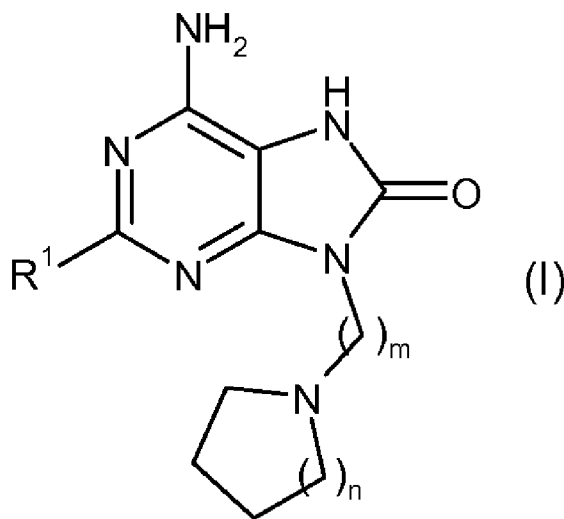
AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, 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,

[Continued on next page]

(54) Title: PURINE DERIVATIVES FOR USE IN THE TREATMENT OF ALLERGIC, INFLAMMATORY AND INFECTIOUS DISEASES



(57) Abstract: Compounds of formula (I): wherein R¹ is C₁₋₆alkylamino, C₁₋₆alkoxy, or C₃₋₇cycloalkyloxy; m is an integer having a value of 3 to 6; n is an integer having a value of 0 to 4; and salts thereof are inducers of human interferon. Compounds which induce human interferon may be useful in the treatment of various disorders, for example the treatment of allergic diseases and other inflammatory conditions for example allergic rhinitis and asthma, the treatment of infectious diseases and cancer, and may also be useful as vaccine adjuvants.



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, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
- *of inventorship (Rule 4.17(iv))*

Published:

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

- *with international search report (Art. 21(3))*