



(51) International Patent Classification:

C07D 403/12 (2006.01) C07D 401/12 (2006.01)
C07D 401/14 (2006.01) C07D 405/12 (2006.01)
C07D 401/10 (2006.01) C07D 239/47 (2006.01)

(21) International Application Number:

PCT/IB2014/066422

(22) International Filing Date:

28 November 2014 (28.11.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

13195081.8 29 November 2013 (29.11.2013) EP

(71) Applicant (for all designated States except US): NO-VARTIS AG [CH/CH]; Lichtstrasse 35, CH-4056 Basel (CH).

(72) Inventors; and

(71) Applicants (for US only): **ANGST, Daniela** [CH/CH]; Novartis Pharma AG, Novartis Institutes for Biomed. Research, Postfach, CH-4002 Basel (CH). **GESSIER, François** [FR/CH]; Novartis Pharma AG, Novartis Institutes for Biomed. Research, Postfach, CH-4002 Basel (CH). **VULPETTI, Anna** [IT/CH]; Novartis Pharma AG, Novartis Institutes for Biomed. Research, Postfach, CH-4002 Basel (CH).

(74) Common Representative: NOVARTIS AG; Lichtstrasse 35, CH-4056 Basel (CH).

(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, 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, ST, 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).

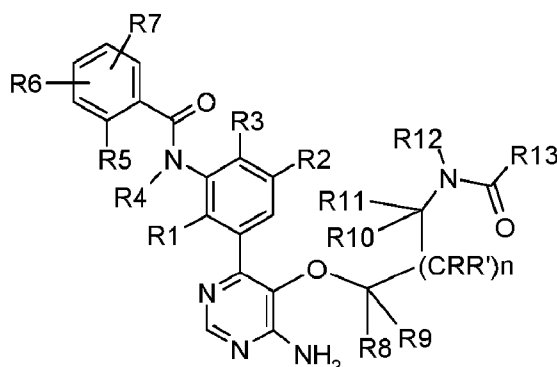
Declarations under Rule 4.17:

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

Published:

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

(54) Title: NOVEL AMINO PYRIMIDINE DERIVATIVES



(I)

(57) Abstract: The present invention describes new amino pyrimidine derivatives of formula (I) and pharmaceutically acceptable salts thereof which appear to interact with Bruton's tyrosine kinase (Btk). Accordingly, the novel amino pyrimidines may be effective in the treatment of autoimmune disorders, inflammatory diseases, allergic diseases, airway diseases, such as asthma and chronic obstructive pulmonary disease (COPD), transplant rejection, cancers e.g. of hematopoietic origin or solid tumors.