



(51) International Patent Classification:

C07J 63/00 (2006.01) A61P 31/18 (2006.01)

A61K 31/56 (2006.01)

(21) International Application Number:

PCT/US2012/056186

(22) International Filing Date:

20 September 2012 (20.09.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/537,099 21 September 2011 (21.09.2011) US

(71) Applicant: BRISTOL-MYERS SQUIBB COMPANY [US/US]; Route 206 and Province Line Road, Princeton, NJ 08543-4000 (US).

(72) Inventors: LIU, Zheng; c/o Bristol-Myers Squibb Company, 5 Research Parkway, Wallingford, CT 06492 (US). MEANWELL, Nicholas A.; c/o Bristol-Myers Squibb Company, 5 Research Parkway, Wallingford, CT 06492 (US). REGUEIRO-REN, Alicia; c/o Bristol-Myers Squibb Company, 5 Research Parkway, Wallingford, CT 06492 (US).

(74) Agents: LEVIS, John F. et al.; Bristol-Myers Squibb Company, P.O. Box 4000, Princeton, NJ 08543-4000 (US).

(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).

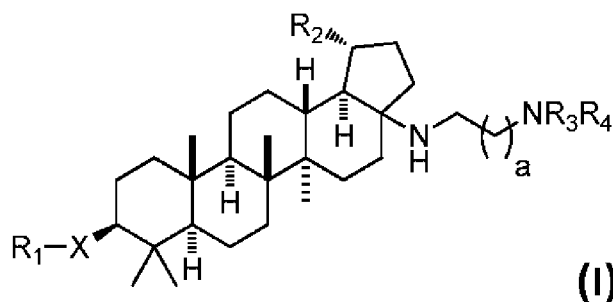
Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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

(54) Title: NOVEL BETULINIC ACID DERIVATIVES WITH ANTIVIRAL ACTIVITY



(57) Abstract: Compounds of Formula I: that possess unique antiviral activity are provided as HIV maturation inhibitors. These compounds are useful for the treatment of HIV and AIDS.