



(51) International Patent Classification:

C07H 19/073 (2006.01) A61K 31/7068 (2006.01)
C07H 19/10 (2006.01) A61P 31/14 (2006.01)

(21) International Application Number:

PCT/US2015/045849

(22) International Filing Date:

19 August 2015 (19.08.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/040,349 21 August 2014 (21.08.2014) US

(71) Applicant: GILEAD SCIENCES, INC. [US/US]; Attn: Intellectual Property Dept., 333 Lakeside Drive, Foster City, CA 94404 (US).

(72) Inventors: CLARKE, Michael, O'Neil Hanrahan; C/o Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, CA 94404 (US). MACKMAN, Richard, L.; C/o Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, CA 94404 (US). SIEGEL, Dustin; C/o Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, CA 94404 (US).

(74) Agent: ECK, Steven, R.; Gilead Sciences, Inc., Attn: Intellectual Property Dept., 333 Lakeside Drive, Foster City, CA 94404 (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, 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.

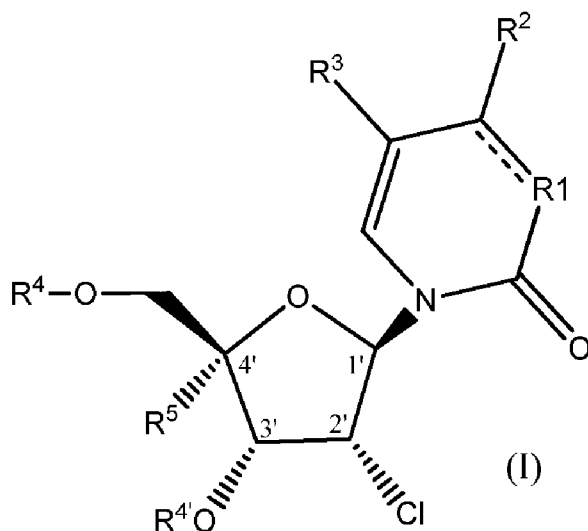
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, 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))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: 2'-CHLORO AMINOPYRIMIDINONE AND PYRIMIDINE DIONE NUCLEOSIDES



(57) Abstract: Provided herein are formulations, methods and substituted 2'-chloro aminopyrimidinone and pyrimidine dione compounds of Formula (I) for treating *Pneumovirinae* virus infections, including respiratory syncytial virus infections, as well as methods and intermediates for synthesis of substituted 2'-chloro aminopyrimidinone and pyrimidine dione compounds.



Published:

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