

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
02 September 2021 (02.09.2021)



(10) International Publication Number
WO 2021/173522 A1

(51) International Patent Classification:

C07D 471/22 (2006.01) A61P 31/18 (2006.01)

A61K 31/4995 (2006.01)

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).

(21) International Application Number:

PCT/US2021/019179

(22) International Filing Date:

23 February 2021 (23.02.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/980,857 24 February 2020 (24.02.2020) US

63/036,268 08 June 2020 (08.06.2020) US

63/128,670 21 December 2020 (21.12.2020) US

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))

(71) Applicant: GILEAD SCIENCES, INC. [US/US]; 333 Lakeside Drive, Foster City, California 94404 (US).

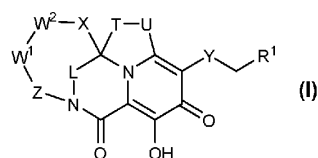
(72) Inventors: JIANG, Lan; c/o Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, California 94404 (US). LIN, David W.; c/o Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, California 94404 (US). MITCHELL, Michael L.; c/o Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, California 94404 (US). ROBERTS, Ezra; c/o Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, California 94404 (US). SCHWARZWALDER, Gregg M.; c/o Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, California 94404 (US).

(74) Agent: BAJPAI, Reena et al.; Gilead Sciences, Inc., 333 Lakeside Drive, Foster City, California 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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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,

(54) Title: TETRACYCLIC COMPOUNDS FOR TREATING HIV INFECTION



(57) Abstract: The present disclosure relates generally to certain tetracyclic compounds, pharmaceutical compositions comprising said compounds, and methods of making said compounds and pharmaceutical compositions. The compounds of the disclosure are useful in treating or preventing human immunodeficiency virus (HIV) infection. (Formula (I))

WO 2021/173522 A1