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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
05 May 2022 (05.05.2022)

WIPO | PCT

(10) International Publication Number
WO 2022/094409 A1

(51) International Patent Classification:
C07D 417/12 (2006.01) *A61P 35/00* (2006.01)
A61K 31/5377 (2006.01) *A61P 37/00* (2006.01)

(21) International Application Number:
PCT/US2021/057584

(22) International Filing Date:
01 November 2021 (01.11.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/108,803 02 November 2020 (02.11.2020) US
63/190,107 18 May 2021 (18.05.2021) US

(71) Applicant: **TRETHERA CORPORATION** [US/US]; 13547 Ventura Blvd., Ste. 363, Sherman Oaks, California 91423 (US).

(72) Inventors: **LITZINGER, David**; 13547 Ventura Blvd., Ste. 363, Sherman Oaks, California 91423 (US). **SCHULTZ, Kenneth A.**; 13547 Ventura Blvd., Ste. 363, Sherman Oaks, California 91423 (US).

(74) Agent: **HECKER, Peter A.**; Wilson Sonsini, 650 Page Mill Road, Palo Alto, California 94304 (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, 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,

(54) **Title:** CRYSTALLINE FORMS OF A DEOXYCYTIDINE KINASE INHIBITOR AND USES THEREOF

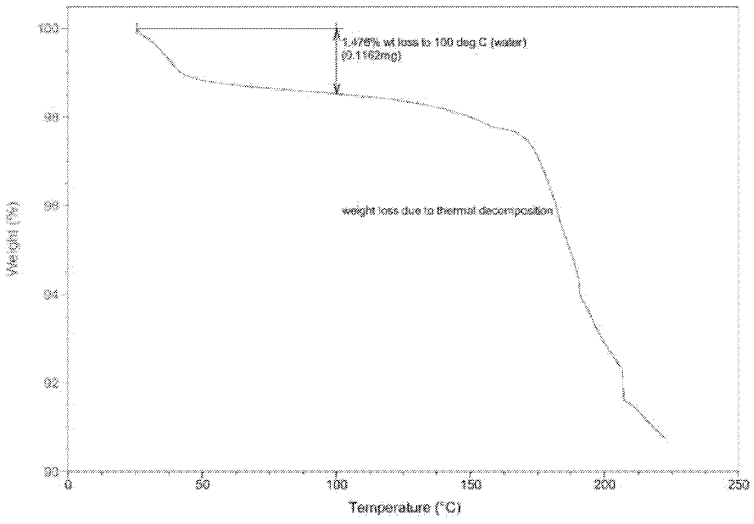


FIG. 3

(57) **Abstract:** Described herein are crystalline forms of compounds that are deoxycytidine kinase (dCK) inhibitors, methods of making such crystalline forms, pharmaceutical compositions and medicaments comprising such crystalline forms, and methods of using such crystalline forms in the treatment of conditions, diseases, or disorders that would benefit from modulation of deoxycytidine kinase (dCK) activity.

WO 2022/094409 A1

[Continued on next page]

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

Published:

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

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*