

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
13 October 2022 (13.10.2022)



(10) International Publication Number
WO 2022/216971 A1

(51) International Patent Classification:

C07D 237/20 (2006.01) A61P 17/00 (2006.01)
C07D 237/26 (2006.01) A61P 19/02 (2006.01)
C07D 237/34 (2006.01) A61P 25/00 (2006.01)
C07D 405/12 (2006.01) A61P 27/00 (2006.01)
C07D 405/14 (2006.01) A61P 29/00 (2006.01)
C07D 471/04 (2006.01) A61P 31/00 (2006.01)
C07D 491/04 (2006.01) A61P 35/00 (2006.01)
C07D 491/10 (2006.01) A61P 37/00 (2006.01)
C07D 495/04 (2006.01) A61K 31/501 (2006.01)
A61P 3/00 (2006.01) A61K 31/502 (2006.01)
A61P 9/00 (2006.01) A61K 31/5025 (2006.01)
A61P 11/00 (2006.01)

(21) International Application Number:

PCT/US2022/023893

(22) International Filing Date:

07 April 2022 (07.04.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/171,932 07 April 2021 (07.04.2021) US
17/528,928 17 November 2021 (17.11.2021) US

(71) Applicant: VENTUS THERAPEUTICS U.S., INC.
[US/US]; 100 Beaver Street, Suite 202, Waltham, Massachusetts 02453 (US).

(72) Inventors; and

(71) Applicants: DORICH, Stéphane [CA/CA]; 124 avenue Pendennis, Pointe-Claire, Québec H9R 1H6 (CA). BURCH, Jason [CA/CA]; 110 Boulevard Saint-Jean, Pointe-Claire, Québec H9S 4Z1 (CA). ST-ONGE, Miguel [CA/CA]; 1173 rue des Mesanges, Saint-Lazare, Québec J7T 2L5 (CA). CHEFSON, Amandine [CA/CA]; 6868 rue Jogues, Montreal, Québec H4E 2W8 (CA). CÔTÉ, Alexandre [CA/CA]; 753 Boul. Union, Laval, Québec H7X 1X7 (CA). BEVERIDGE, Ramsay [CA/CA]; 73 ave. Summerhill, Pointe-Claire, Québec H9R 2L3 (CA). CIBLAT, Stéphane [CA/CA]; 1260 rue Pauline-Julien, Montréal, Québec H2J 0A2 (CA).

(74) Agent: ERLACHER, Heidi A. et al.; 1299 Pennsylvania Ave., NW Suite 700, Washington, District of Columbia 20004 (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, JM, 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, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

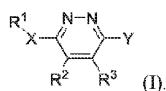
Declarations under Rule 4.17:

— 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: PYRIDAZINE COMPOUNDS FOR INHIBITING NLRP3



(57) Abstract: The present disclosure relates to inhibitors of NLRP3 useful in the treatment of diseases and disorders inhibited by said protein and having the Formula (I):