

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
05 January 2023 (05.01.2023)



(10) International Publication Number
WO 2023/275366 A1

(51) International Patent Classification:

C07D 237/34 (2006.01) C07D 471/04 (2006.01)

(21) International Application Number:

PCT/EP2022/068292

(22) International Filing Date:

01 July 2022 (01.07.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/217,970 02 July 2021 (02.07.2021) US

(71) Applicants: **ASTRAZENECA AB** [SE/SE]; SE-151 85 Södertälje (SE). **mitsubishi tanabe pharma CORPORATION** [JP/JP]; 3-2-10, Dosho-machi, Chuo-ku, Osaka-shi, Osaka 5418505 (JP).

(72) Inventors: **JOHANSSON, Lars Anders Mikael**; AstraZeneca AB, SE-151 Södertälje (SE). **GRADÉN, Henrik**; AstraZeneca AB, SE-151 Södertälje (SE). **BERGONZINI, Giulia**; AstraZeneca AB, SE-151 Södertälje (SE). **SUGAMA, Hiroshi**; Mitsubishi Tanabe Pharma Corporation, 3-2-10, Dosho-machi, Chuo-ku, Osaka-shi, Osaka 5418505 (JP). **MATSUMURA, Takehiko**; Mitsubishi Tanabe Pharma Corporation, 3-2-10, Dosho-machi, Chuo-ku, Osaka-shi, Osaka 5418505 (JP).

(74) Agent: **ASTRAZENECA INTELLECTUAL PROPERTY**; Milstein Building, Granta Park, Cambridge, Cambridgeshire CB21 6GH (GB).

(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, IQ, 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).

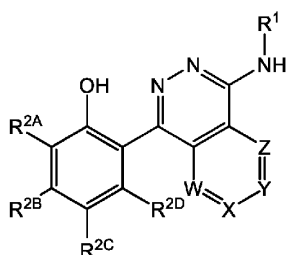
Declarations under Rule 4.17:

— 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))
— 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))

(54) Title: NLRP3 INFLAMMASOME INHIBITORS



(I)

(57) Abstract: The specification generally relates to compounds of Formula (I), and pharmaceutically acceptable salts thereof, where R¹, R^{2A}, R^{2B}, R^{2C}, R^{2D}, W, X, Y, and Z have the meanings defined herein. Such compounds are useful in inhibiting NLRP3 inflammasome activity and may be useful as therapeutic agents. The specification also relates to the use of such compounds to treat or prevent diseases and conditions in which the NLRP3 inflammasome is implicated. The specification further relates to compositions comprising such compounds.



WO 2023/275366 A1