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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
02 October 2025 (02.10.2025)

WIPO | PCT

(10) International Publication Number
WO 2025/202991 A1

(51) International Patent Classification:
C07D 473/16 (2006.01) *A61P 35/00* (2006.01)
A61K 31/52 (2006.01)

(21) International Application Number:
PCT/IB2025/053301

(22) International Filing Date:
28 March 2025 (28.03.2025)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/571,558 29 March 2024 (29.03.2024) US

(71) Applicant: **ASTRAZENECA AB** [SE/SE]; SE-151-85 Södertälje (SE).

(72) Inventor: **WU, Dedong**; c/o ASTRAZENECA PHARMACEUTICALS LP, 1800 Concord Pike, P.O. Box 15437, Wilmington, Delaware 19850-5437 (US).

(74) Agent: **ASTRAZENECA INTELLECTUAL PROPERTY**; Eastbrook House, Shaftesbury Road, Cambridge Cambridgeshire CB2 8BF (GB).

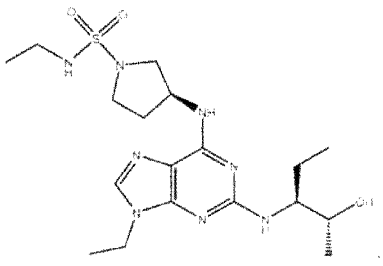
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, 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, UY, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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))*
— *of inventorship (Rule 4.17(iv))*

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))*
— *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*

(54) Title: CRYSTALLINE FORM OF (S)-N-ETHYL-3-((9-ETHYL-2-(((2R,3S)-2-HYDROXYPENTAN-3-YL)AMINO)-9H-PURIN-6-YL)AMINO)-PYRROLIDINE-1-SULFONAMIDE



(I)

(57) Abstract: Crystalline form of *N*-ethyl-3-((9-ethyl-2-(((2R,3S)-2-hydroxypentan-3-yl)amino)-9*H*-purin-6-yl)amino)-pyrrolidine-1-sulfonamide; corresponding pharmaceutical compositions; uses to treat or prevent cyclin-dependent kinase 2 (CDK2)-mediated conditions; kits; and methods of preparation. (I)

WO 2025/202991 A1