

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
22 September 2022 (22.09.2022)



(10) International Publication Number
WO 2022/198112 A1

(51) International Patent Classification:

C07D 401/14 (2006.01) A61K 31/506 (2006.01)
C07D 405/14 (2006.01) A61K 31/5377 (2006.01)
C07D 413/14 (2006.01) A61K 31/5386 (2006.01)
C07D 471/08 (2006.01) A61P 1/12 (2006.01)
C07D 471/20 (2006.01) A61P 17/02 (2006.01)
C07D 487/10 (2006.01) A61P 25/16 (2006.01)
C07D 498/10 (2006.01) A61P 25/28 (2006.01)
A61K 31/451 (2006.01) A61P 31/08 (2006.01)
A61K 31/496 (2006.01)

(21) International Application Number:

PCT/US2022/021049

(22) International Filing Date:

19 March 2022 (19.03.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/163,328	19 March 2021 (19.03.2021)	US
63/228,731	03 August 2021 (03.08.2021)	US
63/243,014	10 September 2021 (10.09.2021)	US
63/245,411	17 September 2021 (17.09.2021)	US

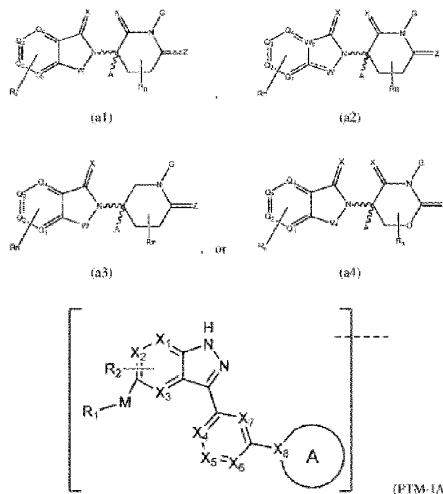
(71) Applicant: ARVINAS OPERATIONS, INC. [US/US]; 5 Science Park, New Haven, CT 06511 (US).

(72) Inventors: ARAUJO, Erika; 64 Old Quarry Road, Woodbridge, CT 06525 (US). BERLIN, Michael; 14 Hendrick Road, Flemington, NJ 08822 (US). SPARKS, Steven, M.; 76 Stillmeadow Drive, Guilford, CT 06437 (US). WANG, Jing; 25 Elm Street, Milford, CT 06460 (US). ZHANG, Wei; 218 Opening Road, Milford, CT 06443 (US). DONG, Hanqing; 248 Opening Hill Rd., Madison, CT 06443 (US).

(74) Agent: TRINQUE, Brian, C.; Lathrop GPM LLP, 28 State Street, Boston, MA 02109 (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,

(54) Title: INDAZOLE BASED COMPOUNDS AND ASSOCIATED METHODS OF USE



(57) Abstract: Bifunctional compounds, of formula PTM-L-CLM, where the CLM is of formulae al-a4, the PTM f formula PTM-1A and L is a ligand. These compounds act on several diseases via agonism on LRRK2 and cereblon E3 ubiquitin ligase.

[Continued on next page]

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))*
- *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))*