

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
01 February 2024 (01.02.2024)



(10) International Publication Number
WO 2024/026512 A2

- (51) **International Patent Classification:**
C07D 401/04 (2006.01) *C07D 231/10* (2006.01)
- (21) **International Application Number:**
PCT/US2023/071380
- (22) **International Filing Date:**
31 July 2023 (31.07.2023)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
63/369,892 29 July 2022 (29.07.2022) US
- (71) **Applicant:** **NORTHWESTERN UNIVERSITY**
[US/US]; 633 Clark Street, Evanston, IL 60208 (US).
- (72) **Inventors:** **SCHILTZ, Gary E.**; 633 Clark Street, c/o Northwestern University INVO, Evanston, IL 60208 (US).
ABDULKADIR, Sarki Abba; 633 Clark Street, c/o Northwestern University INVO, Evanston, IL 60208 (US).

(74) **Agent:** **GULMEN, Tolga S.**; Quarles & Brady LLP, 411 E Wisconsin Avenue, Milwaukee, WI 53202 (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, 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, 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,

(54) **Title:** INHIBITORS OF MYC AND USES THEREOF

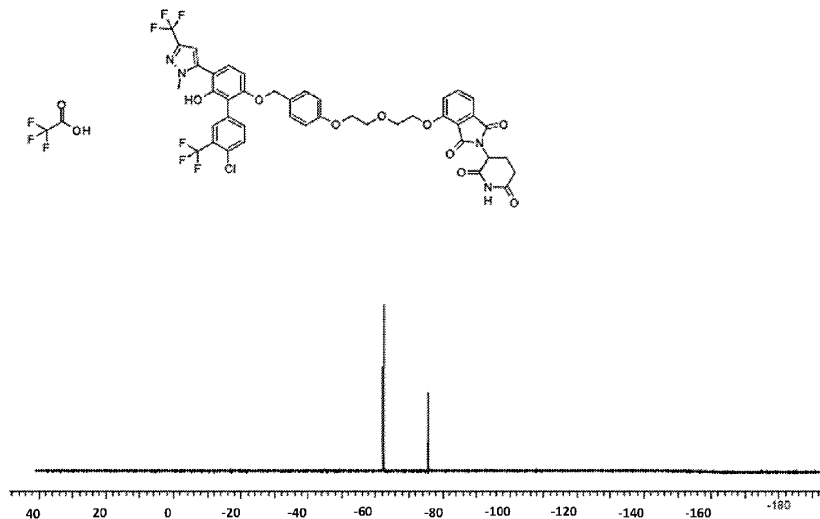


Figure 1

(57) **Abstract:** Disclosed are substituted heterocyclic compounds and proteolysis-targeting chimeric molecules (PROTACs). The substituted heterocycles disclosed herein are shown to be useful in inhibiting c-MYC. The disclosed PROTACs are shown to induce degradation of c-MYC protein. The substituted heterocyclic compounds and proteolysis-targeting chimeric molecules (PROTACs) disclosed, herein may be utilized as therapeutics for treating cancer and cell proliferative disorders.

[Continued on next page]

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

Published:

- *without international search report and to be republished
upon receipt of that report (Rule 48.2(g))*