

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
18 April 2024 (18.04.2024)



(10) International Publication Number
WO 2024/079682 A1

(51) International Patent Classification:

C07D 271/10 (2006.01) A61P 25/00 (2006.01)
A61K 31/541 (2006.01) C07D 413/04 (2006.01)
A61P 35/00 (2006.01) C07D 413/12 (2006.01)
A61P 29/00 (2006.01) C07D 413/14 (2006.01)
A61P 37/00 (2006.01) C07D 487/08 (2006.01)

(21) International Application Number:

PCT/IB2023/060289

(22) International Filing Date:

12 October 2023 (12.10.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10-2022-0132710 14 October 2022 (14.10.2022) KR

(71) Applicant: **CHONG KUN DANG PHARMACEUTICAL CORP.** [KR/KR]; 8, Chungjeong-ro, Seodaemun-Gu, Seoul 03742 (KR).

(72) Inventors: **OH, Jung Taek**; 315-20, Dongbaekjukjeon-daero, Giheung-gu, Yongin-si, Gyeonggi-do 16995 (KR). **SONG, HyeSeung**; 315-20, Dongbaekjukjeon-daero, Giheung-gu, Yongin-si, Gyeonggi-do 16995 (KR). **LEE, Chang Sik**; 315-20, Dongbaekjukjeon-daero, Giheung-gu, Yongin-si, Gyeonggi-do 16995 (KR).

(74) Agent: **AHN, So Young**; 3rd Fl., 416, Nonhyeon-ro, Gangnam-Gu, Seoul 06224 (KR).

(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, 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.

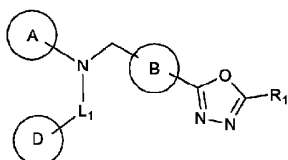
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: SULFOXIMINE COMPOUNDS AS HISTONE DEACETYLASE 6 INHIBITOR, AND PHARMACEUTICAL COMPOSITION COMPRISING THE SAME

[Formula I]



(57) Abstract: The present invention relates to a sulfoximine compound having a novel structure, stereoisomers thereof or pharmaceutically acceptable salts thereof, and a use thereof for preventing or treating histone deacetylase-mediated diseases. The sulfoximine compound having a novel structure according to the present invention may be represented by Formula (I) below.

WO 2024/079682 A1