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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
23 August 2018 (23.08.2018)

WIPO | PCT

(10) International Publication Number
WO 2018/152117 A1

(51) International Patent Classification:
A61K 31/445 (2006.01) *C07D 247/02* (2006.01)
A61K 31/4523 (2006.01) *C07D 471/04* (2006.01)
A61K 31/506 (2006.01) *C07D 471/10* (2006.01)

(21) International Application Number:
PCT/US2018/018022

(22) International Filing Date:
13 February 2018 (13.02.2018)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/458,671 14 February 2017 (14.02.2017) US

(71) Applicant: **EFFECTOR THERAPEUTICS, INC.** [US/US]; 11180 Roselle Street, San Diego, CA 92121 (US).

(72) Inventors: **ERNST, Justin, T.**; 4288 Kerwood Court, San Diego, CA 92130 (US). **SPRENGELER, Paul, A.**; 8706 Gracilior Court, Escondido, CA 92026 (US). **REICH, Siegfried, H**; 5940 La Jolla Mesa Drive, La Jolla, CA 92037 (US). **SPERRY, Samuel**; 1247 Saxony Road, Encinitas, CA 92024 (US).

(74) Agent: **PINO, Mark, J.**; Mintz Levin Cohn Ferris Glovsky and Popeo, PC, 701 Pennsylvania Avenue, NW, Suite 900, Washington, DC 20004 (US).

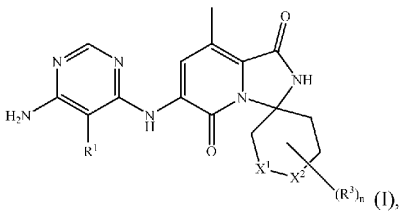
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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).

Published:
— *with international search report (Art. 21(3))*

WO 2018/152117 A1

(54) Title: PIPERIDINE-SUBSTITUTED MNK INHIBITORS AND METHODS RELATED THERETO



(I),

(57) Abstract: The present invention relates to compounds according to Formula (I): or a stereoisomer, tautomer or pharmaceutically acceptable salt thereof wherein X^1, X^2, R^1, $R^{2,}$ R^3 and n are as defined herein. Also described are pharmaceutically acceptable compositions of Formula (I) compounds as well as methods for utilizing the compounds of Formula (I) and the pharmaceutically acceptable compositions of Formula (I) compounds as inhibitors of Mnk as well as therapeutics for the treatment of diseases such as cancer.