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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
23 February 2006 (23.02.2006)

PCT

(10) International Publication Number
WO 2006/019768 A1

(51) International Patent Classification[7]: C07D 403/06, 417/14, 401/14, 409/14, 413/14, A61P 43/00, 29/00, A61K 31/4178

(21) International Application Number: PCT/US2005/024771

(22) International Filing Date: 13 July 2005 (13.07.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/588,502 16 July 2004 (16.07.2004) US

(71) Applicant *(for all designated States except US)*: **SCHERING CORPORATION** [US/US]; 2000 Galloping Hill Road, Kenilworth, NJ 07033 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **YU, Wensheng** [CN/US]; 46 Woodbury Road, Edison, NJ 08820 (US). **TONG, Ling** [CN/US]; 8 Hemlock Circle, Warren, NJ 07059 (US). **CHEN, Lei** [CN/US]; 600 Ashwood Avenue, Roselle Park, NJ 07204 (US). **KOZLOWSKI, Joseph, A.** [US/US]; 1066 Stuart Road, Princeton, New Jersey 08540 (US). **LAVEY, Brian, J.** [US/US]; 54 Smithfield Court, Basking Ridge, New Jersey 07920 (US). **SHIH, Neng-Yang** [US/US]; 4 Overlook Drive, Warren, New Jersey 07059 (US). **MADISON, Vincent, S.** [US/US]; 12 Ronarm Drive, Mountain Lakes, NJ 07046 (US). **ZHOU, Gouwei** [US/US]; 436 South Livingston Avenue, Livingston, New Jersey 07039 (US). **ORTH, Peter** [DE/US]; 334 West 46th Street, Apt. 3R, New York, New York 10036 (US). **GUO, Zhuyan** [CN/US]; 6 Shirewood, Scotch Plains, New Jersey 07076 (US). **WONG, Michael, K. C.** [CA/US]; 999 Hidden Lake Drive, Apt. 3D, North Brunswick, New Jersey 08902 (US). **YANG, De-Yi** [US/US]; 9 East Brooklawn Drive, Morris Plains, New Jersey 07950 (US). **KIM, Seong, Heon** [KR/US]; 52 Cobblewood Road, Livingston, New Jersey 07039 (US). **SHANKAR, Bandarpalle** [US/US]; 1124 Van Arsdale Drive, Branchburg, New Jersey 08853 (US).

(74) Agent: **BANERJEE, Krishna, G.**; SCHERING-PLOUGH CORPORATION, Patent Department K-6-1 1990, 2000 Galloping Hill Road, Kenilworth, NJ 07033-0530 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

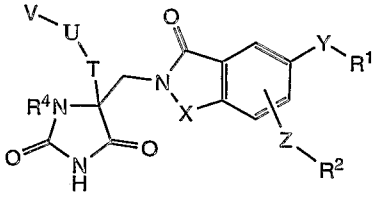
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:
— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

Published:
— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HYDANTOIN DERIVATIVES FOR THE TREATMENT OF INFLAMMATORY DISORDERS



(I)

(57) Abstract: This invention relates to compounds of Formula (1) or a pharmaceutically acceptable salt, solvate or isomer thereof, which can be useful for the treatment of diseases or conditions mediated by MMPs, ADAMs, TACE, TNF- or combinations thereof.

WO 2006/019768 A1