

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2014/062658 A8

(43) International Publication Date
24 April 2014 (24.04.2014)

(51) International Patent Classification:

C07D 401/14 (2006.01) *C07D 417/14* (2006.01)
C07D 413/14 (2006.01) *A61K 31/4709* (2006.01)
C07D 401/06 (2006.01) *A61P 29/00* (2006.01)
C07D 409/14 (2006.01)

(21) International Application Number:

PCT/US2013/065013

(22) International Filing Date:

15 October 2013 (15.10.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/714,419 16 October 2012 (16.10.2012) US
61/725,528 13 November 2012 (13.11.2012) US
61/782,257 14 March 2013 (14.03.2013) US

(71) Applicant: **JANSSEN PHARMACEUTICA NV**
[BE/BE]; Turnhoutseweg 30, B-2340 Beerse (BE).

(72) Inventor; and

(71) Applicant (for US only): **LEONARD, Kristi, A.**
[US/US]; 108 Manor Drive, Lansdale, Pennsylvania 19446 (US).

(72) Inventors: **BARBAY, Kent**; 6311 Sunnybrook Road, Flourtown, Pennsylvania 19031 (US). **EDWARDS, James, P.**; 8723 Hesby Court, San Diego, California 92129 (US). **KREUTTER, Kevin, D.**; 71 Thoreau Drive, Plainsboro, New Jersey 08536 (US). **KUMMER, David, A.**; 11945 Tivoli Park Row Unit #1, San Diego, California 92128 (US). **MAHAROOF, Umar**; 128 Sunrise Drive, North Wales, Pennsylvania 19454 (US). **NISHIMURA, Rachel**; 3957 30th Street, Unit 406, San Diego, California 92104 (US). **URBANSKI, Maud**; 14 McPherson Drive, Flemington, New Jersey 08822 (US). **VENKATESAN, Hariharan**; 17065 Bernardo Oaks Drive, San Diego, Cali-

fornia 92128 (US). **WANG, Aihua**; 1723 Foxwood Drive, Jamison, Pennsylvania 18929 (US). **WOLIN, Ronald, L.**; 16309 Los Rosales Street, San Diego, California 92127 (US). **WOODS, Craig, R.**; 6275 Lakewood Street, San Diego, California 92122 (US). **PIERCE, Joan**; 6405 Cedar Waters Drive, Raleigh, North Carolina 27607 (US). **GOLDBERG, Steven**; 3039 Via de Caballo, Encinitas, California 92024 (US). **FOURIE, Anne**; 13060 Callcott Way, San Diego, California 92130 (US). **XUE, Xiaohua**; 3210 Merryfield Row, San Diego, California 92121 (US).

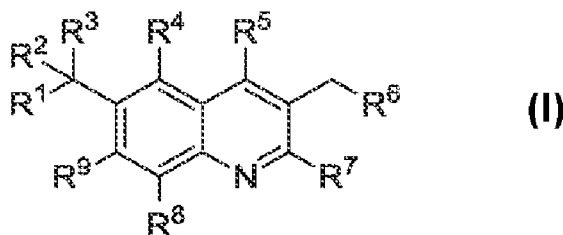
(74) Agents: **JOHNSON, Philip, S.** et al.; Johnson & Johnson, One Johnson & Johnson Plaza, New Brunswick, New Jersey 08933 (US).

(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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, 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, 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).

[Continued on next page]

(54) Title: METHYLENE LINKED QUINOLINYL MODULATORS OF ROR-GAMMA-T



(57) Abstract: The present invention comprises compounds of Formula (I), wherein: R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, and R⁹ are defined in the specification. The invention also comprises a method of treating or ameliorating a syndrome, disorder or disease, wherein said syndrome, disorder or disease is rheumatoid arthritis or psoriasis. The invention also comprises a method of modulating ROR γ t activity in a mammal by administration of a therapeutically effective amount of at least one compound of claim 1.

**Declarations under Rule 4.17:**

- *as to the identity of the inventor (Rule 4.17(i))*
- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

(48) Date of publication of this corrected version:

10 July 2014

(15) Information about Correction:

see Notice of 10 July 2014

Published:

- *with international search report (Art. 21(3))*