

(19) World Intellectual Property
Organization
International Bureau



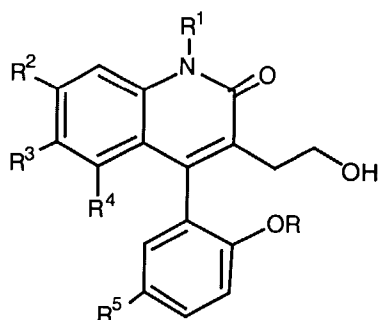
(43) International Publication Date
15 July 2004 (15.07.2004)

PCT

(10) International Publication Number
WO 2004/058260 A1

- (51) International Patent Classification⁷: **A61K 31/47**, C07D 215/16, 215/20 (74) Agents: EPPERSON, James et al.; Bristol-Myers Squibb Company, P.O. Box 4000, Princeton, NJ 08543-4000 (US).
- (21) International Application Number: PCT/US2003/041548 (81) Designated States (*national*): 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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 18 December 2003 (18.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (30) Priority Data: 60/436,160 23 December 2002 (23.12.2002) US
- (71) Applicant: BRISTOL-MYERS SQUIBB COMPANY [US/US]; P. O. Box 4000, Route 206 and Provinceline Road, Princeton, NJ 08543-4000 (US).
- (72) Inventors: VRUDHULA, Vivekananda, M.; 90 Blueberry Hill Reserve, Killingworth, CT 06419 (US). GRIBKOFF, Valentin, Kala; 142 Williams Road, Wallingford, CT 06492 (US). DASGUPTA, Bireshwar; 13-12 Forest Glen Circle, Middletown, CT 06457 (US). BOISSARD, Christopher, G.; 73 Oxbow Lane, Northford, CT 06472 (US).
- Published:**
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- 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: ATROPISOMERS OF 3-SUBSTITUTED-4-ARYLQUINOLIN-2-ONE DERIVATIVES



(57) Abstract: Atropisomers of 3-substituted-4-arylquinolin-2-one derivatives having the general formula wherein R, R₁?, R₂?, R₃?, R₄? and R₅?, are as defined herein, or a non-toxic pharmaceutically acceptable salt, solvate or prodrug thereof. The atropisomers can modulate the large conductance calcium-activated K_i+? channels and are useful in the treatment of disorders which are responsive to the opening of the potassium channels. In addition, the atropisomers can be stable, i.e., do not interconvert, for periods of up to one month, or more.



WO 2004/058260 A1