

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
12 August 2004 (12.08.2004)

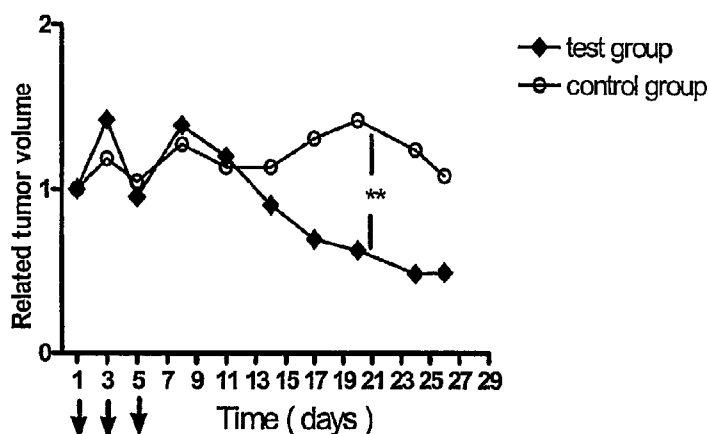
PCT

(10) International Publication Number
WO 2004/067505 A3

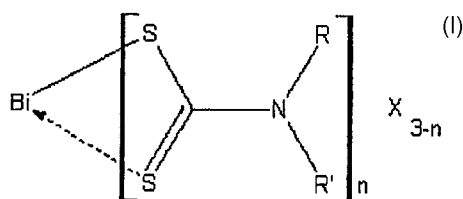
- (51) International Patent Classification⁷: **C07F 9/94**, A61K 31/29, 31/325, C07C 333/14
- (21) International Application Number: PCT/SG2004/000028
- (22) International Filing Date: 29 January 2004 (29.01.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/443,165 29 January 2003 (29.01.2003) US
- (71) Applicant (for all designated States except US): **NATIONAL UNIVERSITY OF SINGAPORE** [SG/SG]; 10 Kent Ridge Crescent, Singapore 119260 (SG).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **TIEKINK, Edward, R.T.** [AU/SG]; 113 Clementi Rd, Block D, #07-05, Singapore 129793 (SG).
- (74) Agent: **WATKIN, Timothy, Lawrence, Harvey**; Lloyd Wise, Tanjong Pagar, P.O.Box 636, Singapore 910816 (SG).
- (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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, 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, 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, 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, IT, LU, MC, NL, 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:**
— of inventorship (Rule 4.17(iv)) for US only
- Published:**
— with international search report

[Continued on next page]

(54) Title: BISMUTH DITHIOCARBAMATE COMPOUNDS AND USES THEREOF



(57) Abstract: The present invention relates to bismuth dithiocarbamate compounds of general formula I: wherein R and R¹ are the same or different, and each is an alkyl, substituted alkyl, aryl or a substituted aryl; X is a halide or a pseudo-halide; and n is either 2 or 3, for use as an active pharmaceutical substance. In particular, they can be used as anti-tumour agents and for the treatment of various forms of tumours. Also provided are some novel bismuth dithiocarbamate compounds and the process for preparing these compounds.





(88) Date of publication of the international search report:

6 May 2005

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.