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| (21) International Application Number: PCT/CA96/00380<br>(22) International Filing Date: 7 June 1996 (07.06.96)<br>(30) Priority Data:<br>08/475,313 7 June 1995 (07.06.95) US<br>(60) Parent Application or Grant<br>(63) Related by Continuation<br>US 475,313 (CIP)<br>Filed on 7 June 1995 (07.06.95)<br>(71) Applicant (for all designated States except US): THE UNIVERSITY OF SASKATCHEWAN [CA/CA]; 105 Administration Place, Saskatoon, Saskatchewan S7N 5A2 (CA).<br>(72) Inventors; and<br>(75) Inventors/Applicants (for US only): DIMMOCK, Jonathan, Richard [CA/CA]; 78 Harvard Crescent, Saskatoon, Saskatchewan S7H 3R1 (CA). PUTHUCODE, Ramanan, Narayan [IN/CA]; #203-105 Cumberland Avenue, Saskatoon, Saskatchewan S7N 1L7 (CA).<br>(74) Agents: GALE, Edwin, J. et al.; Kirby, Eades, Gale, Baker, Station D, Box 3432, Ottawa, Ontario K1P 6N9 (CA). |  | (81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).<br>Published<br>With international search report.<br>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments. |                                                                  |

(54) Title: SEMICARBAZONES HAVING CNS ACTIVITY AND PHARMACEUTICAL PREPARATIONS CONTAINING SAME

(57) Abstract

A compound of general formula (I) useful as an anticonvulsant for disorders of the central nervous system wherein: R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> may be the same or different and each represents a hydrogen or halogen atom, or a C<sub>1</sub>-alkyl, C<sub>3</sub>-cycloalkyl, cyano, C<sub>1</sub>-alkoxy or C<sub>6</sub>-10aryloxy group; R<sup>5</sup> represents a hydrogen atom or a C<sub>1</sub>-alkyl, C<sub>3</sub>-cycloalkyl or C<sub>6</sub>-10aryl group; and X is oxygen or sulfur, or a pharmaceutically-acceptable salt thereof. The compound may be administered orally for treating convulsions in humans or animals.

