



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

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| <p>(21) International Application Number: PCT/CZ00/00002</p> <p>(22) International Filing Date: 25 January 2000 (25.01.00)</p> <p>(30) Priority Data:<br/>PV 273-99 26 January 1999 (26.01.99) CZ</p> <p>(71) Applicants (for all designated States except US): ÚSTAV EXPERIMENTÁLNÍ BOTANIKY AV ČR [CZ/CZ]; Rozvojová 135, 160 00 Praha 6 (CZ). LACHEMA, A.S. [CZ/CZ]; Karásek 1, 621 33 Brno (CZ).</p> <p>(72) Inventors; and<br/>(75) Inventors/Applicants (for US only): HANUŠ, Jan [CZ/CZ]; Pražského 604, 152 00 Praha 5 (CZ). KRYŠTOF, Vladimír [CZ/CZ]; Křížíkova 10, 702 00 Ostrava (CZ). HAJDÚCH, Marián [CZ/CZ]; I.P. Pavlova 18, 775 20 Olomouc (CZ). VESELÝ, Jaroslav [CZ/CZ]; U sokolovny 10, 702 00 Ostrava (CZ). STRNAD, Miroslav [CZ/CZ]; Západní 25, 779 00 Olomouc (CZ).</p> <p>(74) Agent: KUBÁT, Jan; Traplová Hakr Kubát, Law and Patent Offices, Prístavní 24, P.O. Box 38, 170 00 Praha 7 (CZ).</p> |                  | <p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b><br/><i>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.</i></p> |
| <p>(54) Title: SUBSTITUTED NITROGEN HETEROCYCLIC DERIVATIVES AND PHARMACEUTICAL USE THEREOF</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <p>(57) Abstract</p> <p>This invention relates to new substituted nitrogen heterocyclic derivatives having cytostatic, anticancer, antimetabolic, antineurogenerative, immunosuppressive and antimicrobial effects. This invention also relates to the methods for preparation of these derivatives, the use of the compounds as drugs, the pharmaceutical composition and combined pharmaceutical application form comprising an effective dose of a claimed compound and the use of these derivatives for drug production.</p>                                                                                                                                                                                                                                                                                                                                                                                            |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |





































































































































































































