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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
18 May 2007 (18.05.2007)

PCT

(10) International Publication Number
WO 2007/054778 A1

(51) International Patent Classification:
C07D 487/04 (2006.01) *A61P 13/12* (2006.01)
A61K 31/505 (2006.01) *A61P 25/00* (2006.01)
A61P 9/12 (2006.01) *A61P 43/00* (2006.01)

(21) International Application Number:
PCT/IB2006/003132

(22) International Filing Date: 31 October 2006 (31.10.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/735,320 10 November 2005 (10.11.2005) US

(71) Applicant *(for all designated States except US)*: **PFIZER PRODUCTS INC.** [US/US]; Eastern Point Road, Groton, CT 06340 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **TOLLEFSON, Michael Brent** [US/US]; Pfizer Global Research and Development, 700 chesterfield Parkway, Chesterfield, MO 63017 (US).

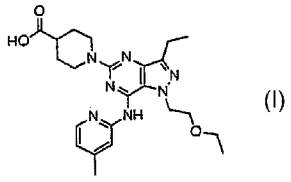
(74) Agent: **FULLER, Grover, F., Jr.**; Pfizer Inc., 150 East 42nd Street, New York, NY 10017-5612 (US).

(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, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

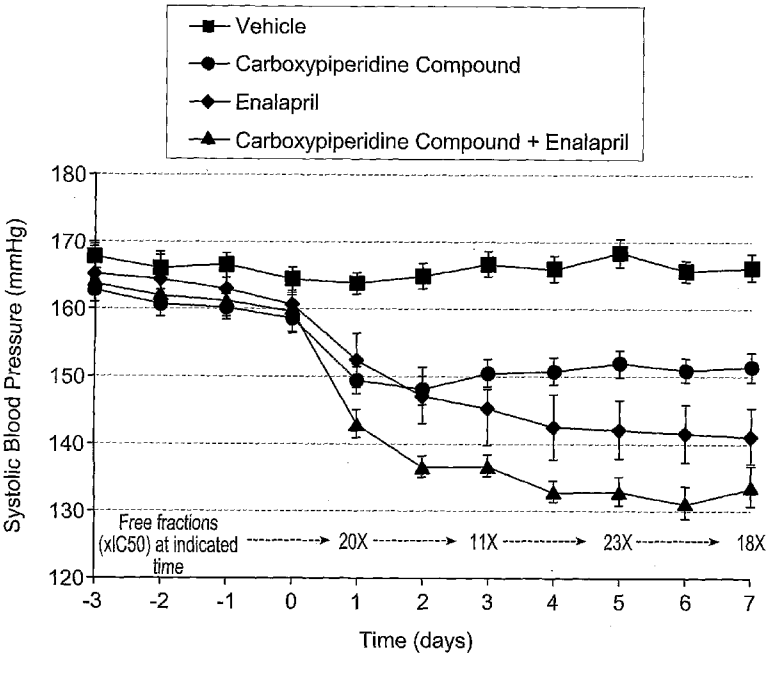
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: PYRAZOLO[4,3-D]PYRIMIDIN-5-YL)DERIVATIVE USED AS PDE5 INHIBITORS



(I)



(57) Abstract: The present invention comprises (I) 1-(1-(2-ethoxyethyl-3-ethyl-7-(4-methylpyridin-2-ylamino)-lH-pyrazolo[4,3-d]pyrimidin-5-yl)piperidine-4-carboxylic acid and its salts. The invention further comprises pharmaceutical compositions, methods of treatment, and synthetic methods relating to Formula (I). Formula (I) is used to inhibit the PDE5 enzyme.

WO 2007/054778 A1

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.