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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
7 June 2007 (07.06.2007)

PCT

(10) International Publication Number
WO 2007/062815 A1

(51) International Patent Classification:
A61K 31/13 (2006.01) *A61K 9/20* (2006.01)
A61K 9/28 (2006.01)

(21) International Application Number:
PCT/EP2006/011438

(22) International Filing Date:
29 November 2006 (29.11.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/740,975 30 November 2005 (30.11.2005) US

(71) Applicant *(for all designated States except US)*: **MERZ PHARMA GMBH & CO. KGaA** [DE/DE]; Eckenheimer Landstrasse 100, 60318 Frankfurt am Main (DE).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **HAUPTMEIER, Bernhard** [DE/DE]; Neue Weinbergstrasse 10, 63571 Gelnhausen (DE). **BECKER, Andreas** [DE/DE]; Landgrafenstrasse 15, 64625 Bensheim (DE).

(74) Agent: **MARSDEN, John, Christopher**; Frank B. Dehn & Co., St Bride's House, 10 Salisbury Square, London EC4Y 8JD (GB).

(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).

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.

WO 2007/062815 A1

(54) Title: NERAMEXANE MODIFIED RELEASE MATRIX TABLET

(57) Abstract: The invention provides novel oral modified release dosage forms of neramexane which are useful for the continuous therapy of patients suffering from diseases and conditions such as Alzheimer's dementia and neuropathic pain. The compositions have drug release profiles that are suitable for achieving steady state plasma concentrations of neramexane which have relatively small fluctuation when administered on a twice-daily or even once-daily regimen. The dosage forms may be designed as modified release matrix tablets, which are optionally coated for taste masking. The invention further provides therapeutic methods of treating conditions such as Alzheimer's dementia and neuropathic pain which involve the administration of such dosage forms.