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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 October 2010 (28.10.2010)

PCT

(10) International Publication Number
WO 2010/121621 A1

(51) International Patent Classification:
A61K 31/495 (2006.01) *A61P 25/22* (2006.01)
A61K 9/08 (2006.01) *A61P 25/24* (2006.01)
A61P 25/00 (2006.01) *A61P 25/28* (2006.01)

(21) International Application Number:
PCT/DK2010/050084

(22) International Filing Date:
16 April 2010 (16.04.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PA 200900531 24 April 2009 (24.04.2009) DK
61/214,540 24 April 2009 (24.04.2009) US

(71) Applicant *(for all designated States except US)*: **H. LUNDBECK A/S** [DK/DK]; Ottiliavej 9, DK-2500 Valby (DK).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **TREPPENDAHL, Svend** [DK/DK]; Frederiksdalsvej 221, DK-2830 Virum (DK). **LOPEZ DE DIEGO, Heidi** [DK/DK]; Hælderne 5, DK-2850 Nærum (DK).

(74) Common Representative: **H. LUNDBECK A/S**; Corporate Patents, Ottiliavej 9, DK-2500 Valby (DK).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, 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, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

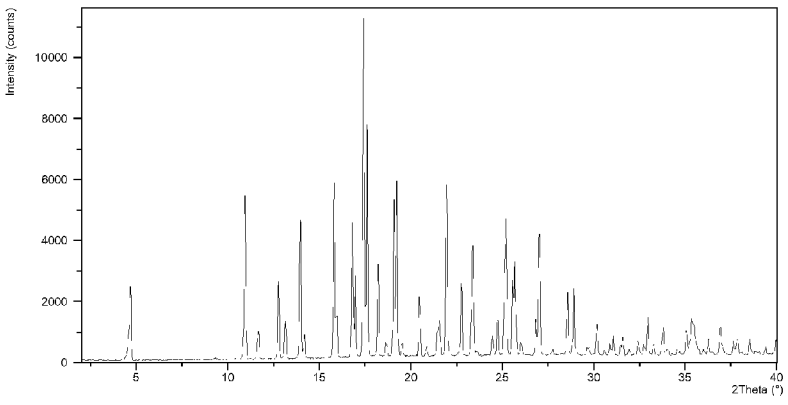
Published:

— *with international search report (Art. 21(3))*

[Continued on next page]

(54) Title: LIQUID FORMULATIONS OF SALTS OF 1-[2-(2,4-DIMETHYLPHENYLSULFANYL)PHENYL]PIPERAZINE

(57) Abstract: Liquid formulations of lactic acid addition salts of 1-[2-(2,4-dimethylphenylsulfanyl)- phenyljpiperazine are provided.



XRPD of L-lactate anhydrate 1 (AH1)

Fig. 1

WO 2010/121621 A1

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*