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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
6 October 2011 (06.10.2011)

PCT

(10) International Publication Number
WO 2011/120779 A1

(51) International Patent Classification:
A61K 9/50 (2006.01) *A61K 9/00* (2006.01)

(21) International Application Number:
PCT/EP2011/053695

(22) International Filing Date:
11 March 2011 (11.03.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10158951.3 1 April 2010 (01.04.2010) EP

(71) Applicant *(for all designated States except US)*: **CHIESI FARMACEUTICI S.P.A.** [IT/IT]; Via Palermo, 26/A, I-43100 Parma (IT).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **MUSA, Rossella** [IT/IT]; Chiesi Farmaceutici S.p.A., Via Palermo, 26/A, I-43100 Parma (IT). **COCCONI, Daniela** [IT/IT]; Chiesi Farmaceutici S.p.A., Via Palermo, 26/A, I-43100 Parma (IT). **CHAMAYOU, Alain** [FR/IT]; Chiesi Farmaceutici S.P.A., Via Palermo, 26/A, I-43100 Parma (IT). **GALET, Laurence** [IT/IT]; Chiesi Farmaceutici S.p.A., Via Palermo, 26/A, I-43100 Parma (IT).

(74) Agent: **MINOJA, Fabrizio**; Bianchetti Bracco Minoja S.r.l., Via Plinio, 63, I-20129 Milano (IT).

(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 (AL, 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, RS, 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))*

— *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))*

WO 2011/120779 A1

(54) Title: PROCESS FOR PREPARING CARRIER PARTICLES FOR DRY POWDERS FOR INHALATION

(57) Abstract: The invention concerns a process for preparing carrier particles for use in dry powder formulations for inhalation. The invention is also directed the carrier particles obtainable by said process and to powder pharmaceutical formulations thereof.