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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 August 2007 (09.08.2007)

PCT

(10) International Publication Number
WO 2007/088571 A3

(51) International Patent Classification:
C07D 207/06 (2006.01) *C07C 211/53* (2006.01)
C07D 207/09 (2006.01) *C07C 215/08* (2006.01)
C07D 207/16 (2006.01) *C07C 233/83* (2006.01)
C07B 57/00 (2006.01) *C07C 237/06* (2006.01)
C07C 211/27 (2006.01)

(21) International Application Number:
PCT/IT2007/000067

(22) International Filing Date: 1 February 2007 (01.02.2007)

(25) Filing Language: Italian

(26) Publication Language: English

(30) Priority Data:
MI2006A000179 2 February 2006 (02.02.2006) IT

(71) Applicant *(for all designated States except US)*: **ABIOGEN PHARMA S.P.A.** [IT/IT]; Via Meucci 36, Località Ospedaletto, I-56014 Pisa (IT).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **NAPOLITANO, Elio** [IT/IT]; Via San Lorenzo, 44, I-56100 Pisa (IT). **FIASCHI, Rita** [IT/IT]; Via San Lorenzo, 44, I-56100 Pisa (IT). **BECHINI, Chiara** [IT/IT]; Via Antonio Pisano detto Pisanello, 12, I-56100 Pisa (IT). **BRUNETTO, Gabriella** [IT/IT]; Via Magri, 13, I-57121 Livorno (IT).

(74) Agents: **PERANI, Aurelio** et al.; c/o Perani Mezzanotte & Partners, Piazza San Babila, 5, I-20122 Milano (IT).

(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).

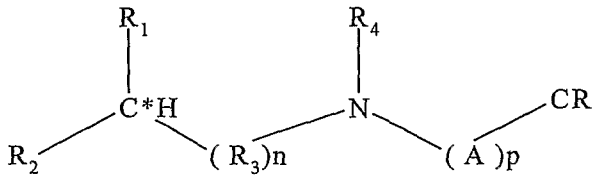
Declaration under Rule 4.17:
— *of inventorship (Rule 4.17(iv))*

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*

(88) Date of publication of the international search report:
10 January 2008

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.

(54) Title: A PROCESS FOR RESOLVING RACEMIC MIXTURES AND A DIASTEREOISOMERIC COMPLEX OF A RESOLVING AGENT AND AN ENANTIOMER OF INTEREST



I

(57) Abstract: A process for resolving a compound in racemic form comprising the following steps is described: a) reacting a compound in racemic form with a resolving agent, b) forming a diastereoisomeric complex of the resolving agent and an enantiomer of interest, c} separating the enantiomer of interest from the obtained diastereoisomer, wherein such a process is characterized in that said resolving agent is a compound of Formula (I). A diastereoisomeric complex between the resolving agent of Formula (I) and the enantiomer of interest is also described. The process according to the invention allows acid and basic racemic mixtures to be separated.

WO 2007/088571 A3