



(51) International Patent Classification:

C07D 213/61 (2006.01) A61K 31/44 (2006.01)
C07D 213/89 (2006.01) A61P 11/00 (2006.01)

(21) International Application Number:

PCT/EP2010/000676

(22) International Filing Date:

4 February 2010 (04.02.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

09001660.1 6 February 2009 (06.02.2009) 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): **AMARI, Gabriele** [IT/IT]; Via Palermo, 26/A, I-43100 Parma (IT). **ARMANI, Elisabetta** [IT/IT]; Via Palermo, 26/A, I-43100 Parma (IT). **DELCANALE, Maurizio** [IT/IT]; Via Palermo, 26/A, I-43100 Parma (IT).

(74) Agent: **BIANCHETTI BRACCO MINOJA S.R.L.**; Via Plinio 63, I-20129 Milano (IT).

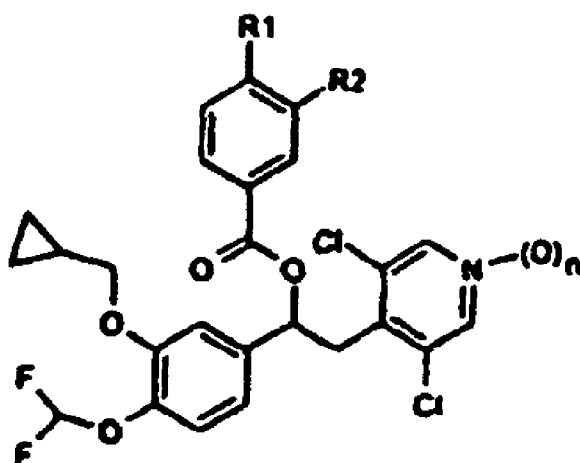
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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, 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))
- 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))

(54) Title: BENZOIC ACID (1-PHENYL-2-PYRIDIN-4-YL) ETHYL ESTERS AS PHOSPHODIESTERASE INHIBITORS



(I)

(57) Abstract: The present invention relates to inhibitors of the phosphodiesterase 4 (PDE4) enzyme. More particularly, the invention relates to compounds that are derivative of -phenyl -2-pyridinyl alkyl alcohols, methods of preparing such compounds, compositions comprising them, combinations and therapeutic uses thereof (I) wherein n is 0 or 1; R1 and R2 may be the same or different, and are selected from the group consisting of: - linear or branched C₁-C₆ alkyl; - OR3 wherein R3 is C₁-C₆ alkyl optionally substituted by one or more C₃-C₇ cycloalkyl groups; and - HNSO₂R4 wherein R4 is C₁-C₄ alkyl optionally substituted with one or more halogen atoms or with a C₁-C₄ group, wherein at least one of R1 and R2 is HNSO₂R4. The other variables are as defined in the claims.