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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 May 2007 (24.05.2007)

PCT

(10) International Publication Number
WO 2007/059507 A3

(51) International Patent Classification:
A61K 47/48 (2006.01) *A61P 29/00* (2006.01)
A61K 31/38 (2006.01) *A61P 37/08* (2006.01)
A61P 11/06 (2006.01)

(21) International Application Number:
PCT/US2006/060914

(22) International Filing Date:
15 November 2006 (15.11.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/736,980 15 November 2005 (15.11.2005) US

(71) Applicants *(for all designated States except US)*: **BAXTER INTERNATIONAL, INC.** [US/US]; ONE BAXTER PARKWAY (DF3-2E), Deerfield, IL 60015 (US). **BAXTER HEALTHCARE S.A.** [CH/—]; HERISTRASSE 2, CH-8304 Wallisellen, Zurich (CH).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **KIPP, James, E.** [US/US]; 609 HERMOSA AVE, Wauconda, IL 60084 (US). **GUPTA, Pramod** [US/US]; 6986 Bennington Drive, Gurnee, IL 60031 (US).

(74) Agent: **MAYO, Michael, C.**; Baxter International, Inc., One Baxter Parkway (DF3-2E), Deerfield, IL 60015 (US).

(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*

(88) Date of publication of the international search report:
18 October 2007

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: COMPOSITIONS COMPRISING LIPOXYGENASE INHIBITORS AND CYCLODEXTRIN

(57) Abstract: The present invention is directed to formulations of inclusion complexes of lipoxygenase inhibitors and cyclodextrins having a therapeutically effective concentration of the lipoxygenase inhibitor, methods of making the same and methods of treating disease states using the same. Forming cyclodextrin complexes permits the enhancement of the aqueous solubility of lipoxygenase inhibitors which allows higher concentrations of the lipoxygenase in solution. Aqueous formulations of lipoxygenase inhibitors-cyclodextrin complexes are suitable for parenteral or oral administration for treating and/or preventing inflammatory disease states. The aqueous formulations can be lyophilized to prolong storage stability, assist in oral administration and/or provide for convenient and economical packaging.

WO 2007/059507 A3