(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 2007/089303 A3

(51) International Patent Classification:
*A61K 39/395* (2006.01)

(21) International Application Number:
PCT/US2006/042564

(22) International Filing Date: 31 October 2006 (31.10.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/732,444 1 November 2005 (01.11.2005) US

(71) Applicant *(for all designated States except US)*: **ABBOTT BIOTECHNOLOGY LTD.** [GB/—]; Clarendon House, 2 Church Street, Hamilton HM 11 (BM).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **MAKSYMOWYCH, Walter, P.** [CA/CA]; Department Of Medicine & Radiology, University Of Alberta, 562 Heritage Medical Research Center, Edmonton, Alberta, T6G 252 (CA). **WONG, Robert, L.** [US/US]; 12 Riggs Court, Basking Ridge, NJ 07920 (US).

(74) Agents: **DECONTI, Giulio, A.** et al.; Lahive & Cockfield, Llp, One Post Office Square, Boston, MA 02109-2127 (US).

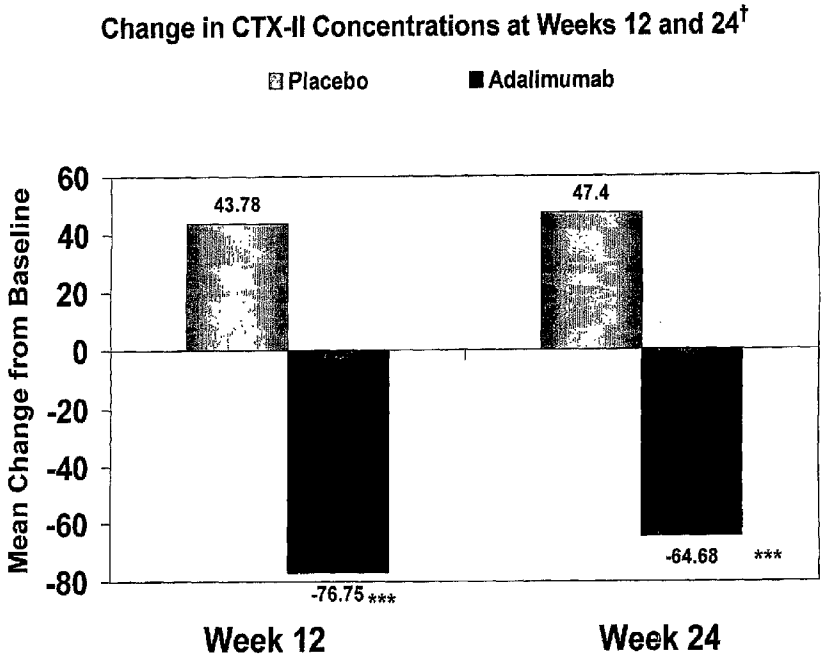
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,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

*[Continued on next page]*

(54) Title: METHODS AND COMPOSITIONS FOR DIAGNOSING ANKYLOSING SPONDYLITIS USING BIOMARKERS




(57) Abstract: The invention provides a method for determining the efficacy of a TNFα inhibitor, such as a TNFα antibody, or an antigen-binding portion thereof, for treating ankylosing spondylitis (AS), using a collagen degradation biomarker and/or a synovitis biomarker.

WO 2007/089303 A3

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

— *with sequence listing part of description published separately in electronic form and available upon request from the International Bureau*

**(88) Date of publication of the international search report:**
3 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.*