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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
23 March 2006 (23.03.2006)

PCT

(10) International Publication Number
WO 2006/031560 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/US2005/031844

(22) International Filing Date:
8 September 2005 (08.09.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/609,092	9 September 2004 (09.09.2004)	US
11/220,362	6 September 2005 (06.09.2005)	US

(71) Applicants *(for all designated States except US)*: **GENENTECH, INC.** [US/US]; 1 DNA Way, South San Francisco, CA 94080-4990 (US). **NOVARTIS, AG** [CH/CH]; Lichstrasse 35, Basel CH-4056 (CH).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **WINTER, Charles, Matthew** [US/US]; 2433 Coronet Blvd., Belmont, CA 94002 (US).

(74) Agent: **BRUESS, Steven, C.**; Merchant & Could P.C., P.O. Box 2903, Minneapolis, MN 55402-0903 (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, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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:

— *without international search report and to be republished upon receipt of that report*

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.

WO 2006/031560 A2

(54) Title: PROCESS FOR CONCENTRATION OF ANTIBODIES AND THERAPEUTIC PRODUCTS THEREOF

(57) Abstract: The present disclosure provides a process for concentrating proteins including an ultrafiltering, a diafiltering, and a second ultrafiltering sequence, at elevated temperatures, such as above about 30°C. The disclosure also includes a process for preparing highly concentrated antibody compositions, and highly concentrated antibody products.