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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
12 January 2012 (12.01.2012)

PCT

(10) International Publication Number
WO 2012/006591 A1

(51) International Patent Classification:
C07K 14/755 (2006.01) *A61K 38/36* (2006.01)
C12N 5/00 (2006.01) *C12N 5/10* (2006.01)

(21) International Application Number:
PCT/US2011/043455

(22) International Filing Date:
8 July 2011 (08.07.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/362,635 8 July 2010 (08.07.2010) US

(71) Applicants *(for all designated States except US)*: **BAXTER INTERNATIONAL INC.** [US/US]; One Baxter Parkway, Deerfield, IL 60015 (US). **BAXTER HEALTHCARE S.A** [CH/CH]; Thurgauerstrasse 130, CH-8152 Glattpark (Opfikon) (CH).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **GRILLBERGER, Leopold** [AT/AT]; Finsterergasse 1a, A-1220 Vienna (AT). **REITER, Manfred** [AT/AT]; Gebrueder-Lang-Gasse 11/17, A-1150 Vienna (AT). **MUNDT, Wolfgang** [AT/AT]; Florianigasse 57/1/26, A-1800 Vienna (AT).

(74) Agent: **TALUKDER, Gargi**; Morgan, Lewis Bockius LLP, One Market, Spear Street Tower, San Francisco, CA 94105 (US).

(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, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, 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, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

[Continued on next page]

(54) Title: METHOD OF PRODUCING RECOMBINANT HIGH MOLECULAR WEIGHT vWF IN CELL CULTURE

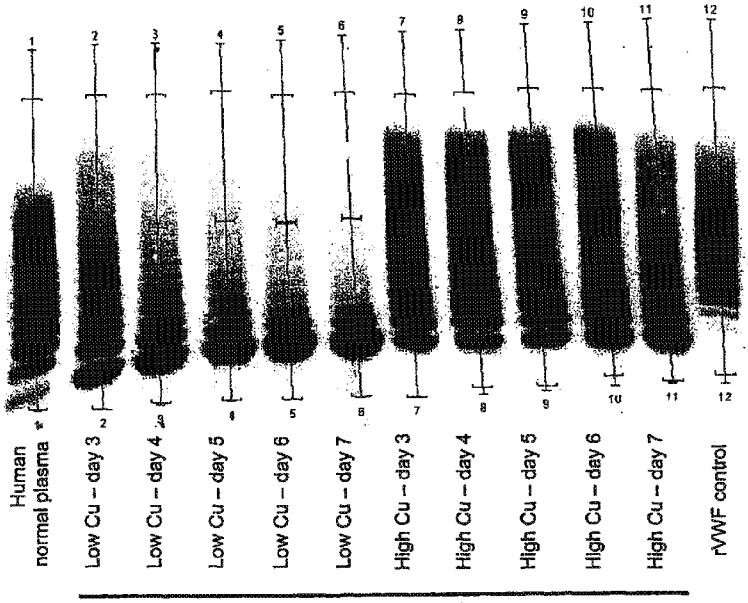


FIG. 1A

(57) Abstract: Among other aspects, the present invention relates to cell culture conditions for producing high molecular weight vWF, in particular, highly multimericWF with a high specific activity and ADAMTS13 with a high specific activity. The cell culture conditions of the present invention can include, for example, a cell culture medium with an increased copper concentration and/or cell culture supernatant with a low ammonium (NH_4^+) concentration. The present invention also provides methods for cultivating cells in the cell culture conditions to express high molecular weight vWF and rA13 having high specific activities.

WO 2012/006591 A1

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

— *with international search report (Art. 21(3))*