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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
27 November 2008 (27.11.2008)

PCT

(10) International Publication Number
WO 2008/142028 A1

(51) International Patent Classification:
C12N 15/90 (2006.01) *C12N 15/10* (2006.01)
C12P 21/02 (2006.01)

(21) International Application Number:
PCT/EP2008/056062

(22) International Filing Date: 16 May 2008 (16.05.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
07009872.8 17 May 2007 (17.05.2007) EP

(71) Applicants *(for all designated States except US)*: **BOEHRINGER INGELHEIM RCV GMBH & CO. KG** [AT/AT]; Dr. Boehringer-Gasse 5-11, A-1121 Wien (AT). **SANDOZ AG** [CH/CH]; Lichtstrasse 35, CH-4056 Basel (CH).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **STRIEDNER, Gerald** [AT/AT]; Kummergasse 7, Stg. 7, A-1210 Wien (AT). **HUBER, Hans** [AT/AT]; Fruchtgasse 3/14, A-1020 Wien (AT). **KELLER, Daniela** [DE/DE]; Boehringer Ingelheim Gmbh, CD Patents, Binger Strasse 173, 55216 Ingelheim am Rhein (DE).

(74) Agent: **HAMMANN, Heinz**; Boehringer Ingelheim GmbH, CD Patents, Binger Strasse 173, 55216 Ingelheim am Rhein (DE).

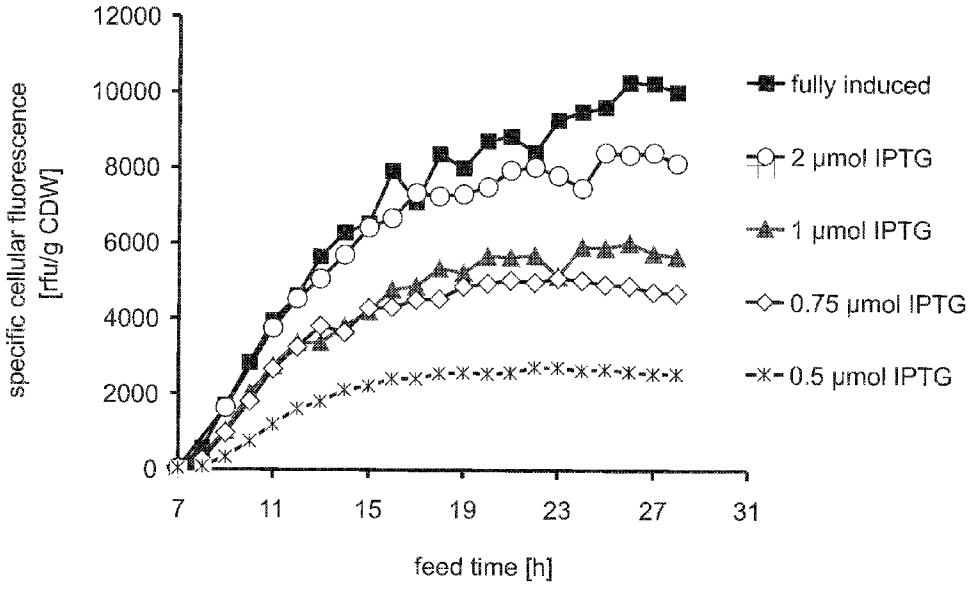
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, 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, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, 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*

(54) Title: METHOD FOR PRODUCING A RECOMBINANT PROTEIN ON A MANUFACTURING SCALE

Fig. 16



(57) Abstract: A method for producing a protein of interest on a manufacturing scale is based on integration,by homologous recombination, of the DNA encoding the protein of interest into a bacterial cell sgenome at a pre-selected site. The manufacturing scale production of recombinant proteins is in the fed-batch mode, semi-continuous or in a chemostat.

WO 2008/142028 A1