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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
3 September 2015 (03.09.2015)

WIPO | PCT

(10) International Publication Number
WO 2015/128509 A1

(51) International Patent Classification:
C12N 15/09 (2006.01)

(21) International Application Number:
PCT/EP2015/054331

(22) International Filing Date:
2 March 2015 (02.03.2015)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
14157324.6 28 February 2014 (28.02.2014) EP

(71) Applicant: **GLENMARK PHARMACEUTICALS S.A.** [CH/CH]; Chemin de la Combeta 5, CH-2300 La Chaux-de-Fonds (CH).

(72) Inventors: **AEBISCHER-GUMY, Christel**; c/o Glenmark Pharmaceuticals, Chemin de la Combeta 5, CH-2300 La Chaux-de-Fonds (CH). **MORETTI, Pierre**; c/o Glenmark Pharmaceuticals, Chemin de la Combeta 5, CH-2300 La Chaux-de-Fonds (CH). **BERTSCHINGER, Martin**; c/o Glenmark Pharmaceuticals, Chemin de la Combeta 5, CH-2300 La Chaux-de-Fonds (CH).

(74) Agent: **SCHOELLHORN, Andreas**; Latscha Schöllhorn Partner AG, Austrasse 24, 4051 Basel (CH).

(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, BN, 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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, 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, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

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

Published:

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

— *with sequence listing part of description (Rule 5.2(a))*

WO 2015/128509 A1

(54) Title: EXPRESSION CONSTRUCTS AND METHODS FOR SELECTING HOST CELLS EXPRESSING POLYPEPTIDES

(57) Abstract: The invention relates to an expression construct for the soluble expression of polypeptides in host cells and for the expression of polypeptides on the surface of host cells, using alternative splicing. The amount of cell membrane expression of polypeptides such as antibodies, antibody fragments and bispecific antibodies can be correlated directly to the amount of soluble polypeptide expressed. In the case of bispecific antibodies, cell membrane expression of heterodimer and homodimer products can be correlated directly to the soluble expression of these products, thereby aiding selection of a desired producer clone.