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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
6 September 2013 (06.09.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/128031 A1

(51) International Patent Classification:
C07K 16/12 (2006.01) *A61P 31/04* (2006.01)

(21) International Application Number:
PCT/EP2013/054262

(22) International Filing Date:
4 March 2013 (04.03.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/606,094 2 March 2012 (02.03.2012) US

(71) Applicant: **ABLYNX NV** [BE/BE]; Technologiepark 21, B-9052 Ghent-Zwijnaarde (BE).

(72) Inventors: **DE TAVERNIER, Evelyn**; Molenberglaan 38, B-9080 Beervelde (BE). **UNION, Ann**; Savooien 15, B-9880 Aalter (BE). **DOMBRECHT, Bruno**; Oude Pontweg 6, B-9070 Heusden (BE). **HERMANS, Guy**; Hundelgemsesteenweg 848, B-9820 Merelbeke (BE).

(74) Agents: **STEFFERL, Andreas** et al.; HOFFMANN - EITLE, Arabellastrasse 4, 81925 Munich (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, 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, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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, 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, ML, MR, NE, SN, TD, TG).

Published:

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

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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

WO 2013/128031 A1

(54) Title: PSEUDOMONAS AERUGINOSA PCRV BINDING SINGLE VARIABLE DOMAIN ANTIBODIES

(57) Abstract: Polypeptides are provided that are capable of significantly inhibiting and/or neutralizing *P aeruginosa*. The polypeptides comprise two or more immunoglobulin single variable domains that are directed against the PcrV protein of *P. aeruginosa*, wherein the "first" immunoglobulin single variable domain and the "second" immunoglobulin single variable domain have different paratopes.