

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
11 April 2019 (11.04.2019)



(10) International Publication Number
WO 2019/070901 A1

(51) International Patent Classification:

C07K 16/00 (2006.01) C07K 14/47 (2006.01)

C07K 16/28 (2006.01)

(21) International Application Number:

PCT/US2018/054237

(22) International Filing Date:

03 October 2018 (03.10.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/568,217 04 October 2017 (04.10.2017) US

(71) Applicant: AMGEN INC. [US/US]; One Amgen Center, Thousand Oaks, California 91320 (US).

(72) Inventor: WALKER, Kenneth; 175 Mesa Avenue, Newbury Park, California 91320 (US).

(74) Agent: DOSS, Raymond et al.; AMGEN INC., One Amgen Center Drive, M/S 28-2-C, Thousand Oaks, California 91320-1799 (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, BN, BR, BW, BY, BZ,

CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, 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.

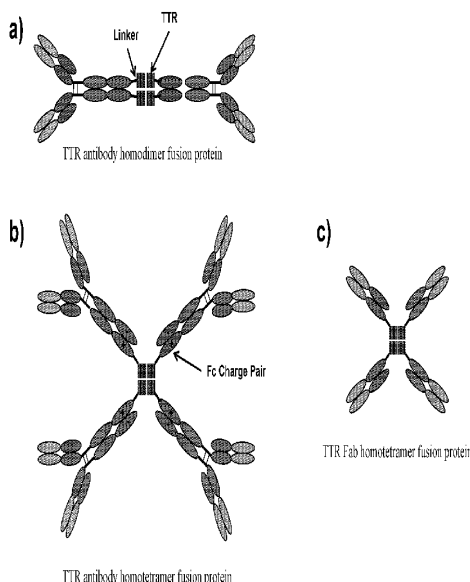
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, 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))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

(54) Title: TRANSTHYRETIN IMMUNOGLOBULIN FUSIONS

Figure 1



(57) Abstract: The present invention relates to transthyretin (TTR) fusions useful in the dimerization and tetramerization of antibodies and antibody fragments, such as Fabs. The TTR fusions proteins described herein are particularly useful in increasing antibody avidity and in enhancing antigen clustering. Methods for treating diseases using the fusion proteins of the present invention are described herein.

WO 2019/070901 A1

[Continued on next page]

Published:

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))