

## CORRECTED VERSION

(19) World Intellectual Property  
Organization  
International Bureau



WIPO | PCT



(10) International Publication Number  
**WO 2013/009545 A8**

(43) International Publication Date  
17 January 2013 (17.01.2013)

- (51) **International Patent Classification:**  
*C07K 1/00* (2006.01) *C12P 21/00* (2006.01)
- (21) **International Application Number:**  
PCT/US20 12/04545 1
- (22) **International Filing Date:**  
3 July 2012 (03.07.2012)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**  
61/505,982 8 July 2011 (08.07.2011) US  
61/585,577 11 January 2012 (11.01.2012) US
- (71) **Applicants (for all designated States except US):** **AMYLIN PHARMACEUTICALS, LLC** [US/US]; Attention: Intellectual Property Group, 9360 Towne Centre Drive, San Diego, CA 92121 (US). **ASTRAZENECA PHARMACEUTICALS LP** [US/US]; 1800 Concord Pike, Wilmington, DE 19897 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** **ERICKSON, Mary** [US/US]; C/o Amylin Pharmaceuticals, Inc., Intellectual Property Group, 9360 Towne Centre Drive, San Diego, CA 92121 (US). **LITZINGER, David, C.** [US/US]; C/o Amylin Pharmaceuticals, Inc., Intellectual Property Group, 9360 Towne Centre Drive, San Diego, CA 92121 (US). **GHOSH, Soumitra, S.** [US/US]; C/o Amylin Pharmaceuticals, Inc., Intellectual Property Group, 9360 Towne Centre Drive, San Diego, CA 92121 (US). **GUO, Zijian** [US/US]; C/o Amylin Pharmaceuticals, Inc., Intellectual Property Group, 9360 Towne Centre Drive, San Diego, CA 92121 (US). **SAMANT, Manoj, P.** [IN/US]; C/o Amylin Pharmaceuticals, Inc., Intellectual Property Group, 9360 Towne Centre Drive, San Diego, CA 92121 (US). **SHARMA, Abhinandini** [IN/US]; C/o Amylin Pharmaceuticals, Inc., Intellectual Property Group, 9360 Towne Centre Drive, San Diego, CA 92121 (US). **MAMEDOVA, Lala** [US/US]; C/o Amylin Pharmaceuticals, Inc., Intellectual Property Group, 9360 Towne Centre Drive, San Diego, CA 92121 (US). **LEVY, Odile, Esther** [US/US]; C/o Amylin Pharmaceuticals, Inc., Intellectual Property Group, 9360 Towne Centre Drive, San Diego, CA 92121 (US). **EKBLAD, Caroline** [SE/SE]; C/o Amylin Pharmaceuticals, Inc., In-

tellectual Property Group, 9360 Towne Centre Drive, San Diego, CA 92121 (US).

(74) **Agent:** **KOERBER, Steven, C**; Kilpatrick Townsend & Stockton LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111 (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, 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).

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.1 7(H))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.1 7(in))

**Published:**

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

(48) **Date of publication of this corrected version:**

27 February 2014

(15) **Information about Correction:**  
see Notice of 27 February 2014

(54) **Title:** ENGINEERED POLYPEPTIDES HAVING ENHANCED DURATION OF ACTION WITH REDUCED IMMUNOGENICITY

(57) **Abstract:** Compounds are provided having inter alia good duration of action, high potency and/or convenient dosing regimens including oral administration, and reduced immunogenicity. The compounds are engineered polypeptides which incorporate an albumin binding domain in combination with one or more biologically active polypeptides. Also provided are pharmaceutical compositions and methods of treatment for diseases and disorders including obesity and overweight, diabetes, dyslipidemia, hyperlipidemia, Alzheimer's disease, fatty liver disease, Short Bowel Syndrome, Parkinson's disease, and cardiovascular disease.



W<sup>o</sup> 2013/009545 A8