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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 October 2014 (09.10.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/165448 A1

(51) International Patent Classification:
C07K 7/08 (2006.01) *A61K 38/10* (2006.01)

(21) International Application Number:
PCT/US2014/032391

(22) International Filing Date:
31 March 2014 (31.03.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/807,714 2 April 2013 (02.04.2013) US
14/229,784 28 March 2014 (28.03.2014) US

(71) Applicants: **PROTAGONIST THERAPEUTICS, INC.** [US/US]; 1455 Adams Drive, Suite 2003, Menlo Park, California 94205 (US). **PATEL, Dinesh V.** [US/US]; 45109 Cougar Circle, Fremont, California 94539 (US). **MATTHEAKIS, Larry C.** [US/US]; 20612 Sunrise Drive, Cupertino, California 95014 (US).

(72) Inventor; and
(71) Applicant *(for US only)*: **BHANDARI, Ashok** [US/US]; 2629 Lotus St., Pleasanton, California 94588 (US).

(74) Agent: **CONKLIN, David R.**; Kirton McConkie, 50 East South Temple, Salt Lake City, Utah 84111 (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, 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, 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, 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, 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).

Published:

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

[Continued on next page]

(54) **Title**: NOVEL α4β7 PEPTIDE DIMER ANTAGONISTS

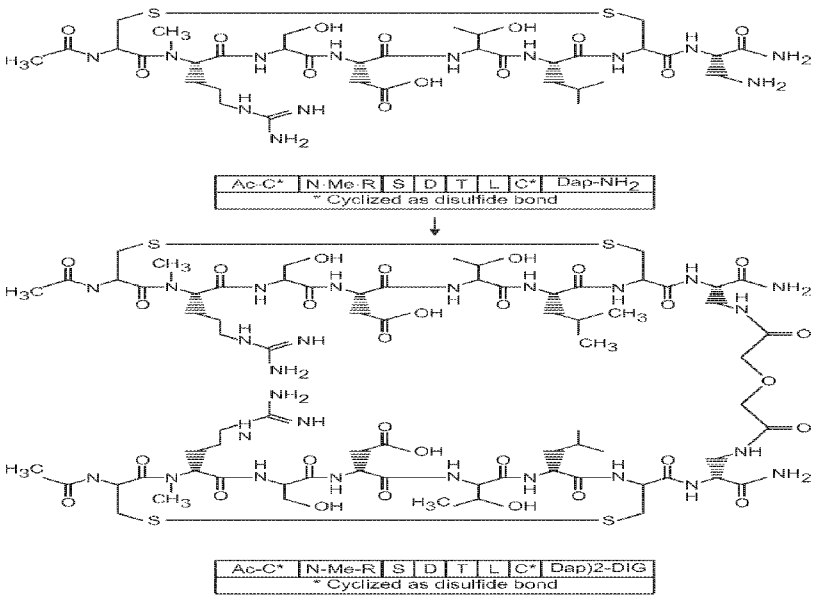


FIG. 2

(57) **Abstract**: The invention relates to disulfide-rich dimer molecules which inhibit binding of α4β7 to the mucosal addressin cell adhesion molecule (MAdCAM) in vivo, and show high selectivity against α4β1 binding.

WO 2014/165448 A1

— *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))*