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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
21 January 2010 (21.01.2010)

PCT

(10) International Publication Number
WO 2010/009346 A2

(51) International Patent Classification:
A61K 39/12 (2006.01)

(21) International Application Number:
PCT/US2009/050903

(22) International Filing Date:
16 July 2009 (16.07.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/081,234 16 July 2008 (16.07.2008) US

(71) Applicant *(for all designated States except US)*: **BAYLOR RESEARCH INSTITUTE** [US/US]; 3434 Live Oak Street, Suite 125, Dallas, TX 75204 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **BANCHEREAU, Jacques, F.** [FR/US]; 6730 Northaven Road, Dallas, TX 75230 (US). **ZURAWSKI, Gerard** [AU/US]; 7620 Jordan Lane, Midlothian, TX 76065 (US). **FLAMAR, Anne-laure** [FR/US]; 8650 Southwestern Blvd. #3914, Dallas, TX 75206 (US). **COBB, Amanda** [US/US]; 7150 E. Grand Ave. #102, Dallas, TX 75223 (US). **MEAD, Holly** [US/US]; 2316 Compton Dr., Plano, TX 75025 (US). **MONTES, Monica** [CO/US]; 3005 Bryan St. #2313, Dallas TX 75204 (GB).

(74) Agent: **CHALKER FLORES, L.L.P.**; 2711 LBJ Freeway, Suite 1036, Dallas, TX 75234 (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, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (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, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

(54) **Title**: HIV VACCINE BASED ON TARGETING MAXIMIZED GAG AND NEF TO DENDRITIC CELLS

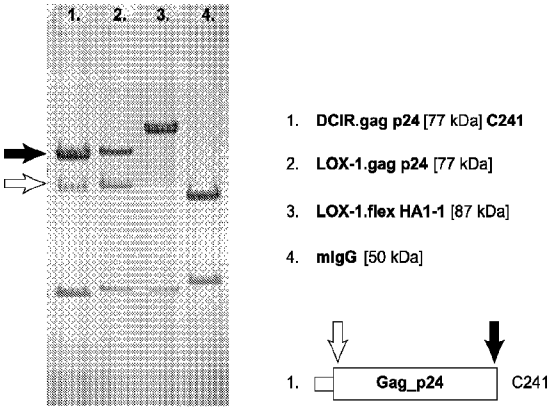


FIG. 1

(57) **Abstract**: The present invention includes compositions and methods for making and using a vaccine that includes a DC-specific antibody or fragment thereof to which an engineered Gag antigen is attached to form an antibody-antigen complex, wherein the Gag antigen is less susceptible to proteolytic degradation by eliminating one or more proteolytic sites or a DC-specific antibody or fragment thereof to which an engineered Nef antigen is attached to form an antibody-antigen complex, wherein the Nef antigen comprises one or more codon usage optimization that increase antibody-antigen complex secretion, or both, wherein the vaccine is able to elicit an HIV-specific T cell immune response to Gag p17, Gag p24, Nef and/or Cy clin D1.

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