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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 October 2009 (22.10.2009)

PCT

(10) International Publication Number
WO 2009/128950 A8

(51) International Patent Classification:
A61K 39/02 (2006.01)

(21) International Application Number:
PCT/US2009/002428

(22) International Filing Date:
17 April 2009 (17.04.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

61/124,617	18 April 2008 (18.04.2008)	US
61/124,604	18 April 2008 (18.04.2008)	US
61/124,670	18 April 2008 (18.04.2008)	US
61/125,660	25 April 2008 (25.04.2008)	US
61/126,993	8 May 2008 (08.05.2008)	US
61/126,978	8 May 2008 (08.05.2008)	US
61/132,594	20 June 2008 (20.06.2008)	US
61/137,840	4 August 2008 (04.08.2008)	US
61/199,793	19 November 2008 (19.11.2008)	US
61/200,354	26 November 2008 (26.11.2008)	US

(71) Applicant *(for all designated States except US)*: **VAXINNATE CORPORATION** [US/US]; 3 Cedar Brook Drive, Cranbury, NJ 08512 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **SONG, Langzhou** [US/US]; 6 Petunia Place, Freehold, NJ 07728 (US). **TUSSEY, Lynda, G.** [US/US]; 67 Truman Avenue, Princeton, NJ 08540 (US). **SHAW, Alan, R.** [US/US]; 3805 Secondwoods, Doylestown, PA 18902 (US). **BECKER, Robert, S.** [US/US]; 4618 Ash Drive, Nazareth, PA 18064 (US). **ZHANG, Yi** [CN/US]; 49 Princeton Arms N Bldg 4, Cranbury, NJ 08512 (US). **UMLAUF, Scott, W.** [US/US]; 112 Crawley Avenue, Pennington, NJ 08534 (US). **TAYLOR, David, N.** [US/US]; 405 Deming Road, Chapel Hill, NC 27514 (US). **LIU, Ge** [US/US]; 12 Hawk Court, East Brunswick, NJ 08816 (US). **YEAGER, Mark, D.** [US/US]; 57 Heather Court, Allendale, NJ 07401 (US). **POWELL, Thomas, J.** [US/US]; 154 Dorset Lane, Madison, CT 06443 (US).

(74) Agents: **MURRAY, Mary, K.** et al.; Hamilton, Brook, Smith & Reynolds, P.C., 530 Virginia Road, P.O. Box 9133, Concord, MA 01742-9133 (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, 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, 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, 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))*

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

(48) Date of publication of this corrected version:
28 January 2010

(15) Information about Correction:
see Notice of 28 January 2010

(54) Title: DELETION MUTANTS OF FLAGELLIN AND METHODS OF USE

(57) Abstract: Compositions that include Toll-like Receptor 5 agonists and at least a portion of at least one influenza antigen can be employed in methods that stimulate an immune response in a subject, in particular, a protective immune response in a subject. Compositions can be associated with particles and employed in the methods in relatively low doses to provide protective immunity to viral infection.

WO 2009/128950 A8