PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

| NAME OF SUBMITTER: | | Annie Estenzo | | | |
|---|--|-----------------------|----------------|--|--|
| ATTORNEY DOCKET NUMBER: | | 77867-591100US-854933 | | | |
| Address Line 4: | SAN FRANCI | SCO, CALIFORNIA 94111 | | | |
| Address Line 2: 8TH FLOOR | | | | | |
| Correspondent Name: KILPATRICK TOWNSEND & STOCKTON LLP Address Line 1: TWO EMBARCADERO CENTER | | | | | |
| Email: aestenzo@kilpatricktownsend.com | | | | | |
| Phone: 415-576-0200 | | | | | |
| Correspondence will be sent via US Mail when the fax attempt is unsuccessful. | | | | | |
| Fax Number: 4155760300 | | | | | |
| CORRESPONDENC | E DATA | | | | |
| Application Number: 13641 | | 1655 | | | |
| Property Type | | Number | | | |
| | ERS Total: 1 | | | | |
| Postal Code: | al Code: 20852-3804 | | | | |
| State/Country: | MARYLAND | | | | |
| City: | | | | | |
| Street Address: | 6011 Executive Boulevard, Suite 325 | | | | |
| Name: | The Government of the United States of America as Represented by the Secretary of The Department of Health and Human Services | | | | |
| RECEIVING PARTY | DATA | | | | |
| Cheng Cheng | | | 11/20/2012 | | |
| Clement Asiedu | | | 11/20/2012 | | |
| Gary J. Nabel | | | 11/20/2012 | | |
| Nancy J. Sullivan | | | 11/27/2012 | | |
| | | Name | Execution Date | | |
| | Y DATA | | | | |
| NATURE OF CONVEYANCE: | | ASSIGNMENT | | | |
| SUBMISSION TYPE: | | NEW ASSIGNMENT | | | |

ASSIGNMENT

JOINT

WHEREAS, We, Nancy J. Sullivan, residing at 4217 Colchester Drive, Kensington MD 20895, United States; Gary J. Nabel, residing at 2520 30th Street, NW, Washington D.C. 20008, Clement Asdieu, residing at <u>12004 Montrose Village Terrace</u>, <u>for (ville ru)2085</u> and Cheng Cheng, residing at <u>12004 Montrose Village Terrace</u>, <u>for (ville ru)2085</u> employees of the Department of Health and Human Services at the time the invention was made, have invented (title of invention): DNA-PROTEIN VACCINATION PROTOCOLS, for which an application to the Commissioner for Patents for grant of Letters Patents of the United States of America has been executed by the undersigned

on (date(s) Declaration signed):

☑ is identified as U.S. Patent Application: Serial No. 13/641,655, which is a US Nat'l Phase (371) of PCT/US2011/032682; and

WHEREAS, the conditions under which said invention was made are such as to entitle the Government of the United States of America under Paragraph 1(a) of Executive Order 10096, to the entire right, title, and interest herein, both domestic and foreign; and

WHEREAS, the Government of the United States of America is desirous of acquiring all domestic and foreign right, title, and interest in the aforesaid invention described in the aforesaid application for Letters Patent of the United States of America; and

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and other valuable considerations, we the undersigned, have sold, assigned, and transferred and by these presents do sell, assign, and transfer unto **The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services** (hereinafter THE GOVERNMENT), and his successors, the full and exclusive right, title, and interest throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file the invention described in the aforesaid application for Letters Patent of the United States of America, and all Letters Patents and Registrations which may be granted on the same in the United States of America and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

> PATENT REEL: 029553 FRAME: 0248

U.S. Patent Application Serial No. 13/641,655

AND, we hereby authorize and request the Commissioner for Patents to issue said Letters Patent to THE GOVERNMENT as assignee of the entire right, title, and interest in and to the same throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file, for the sole use for the full term or terms for which said Letters Patent and Registrations may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof which may be granted as fully and entirely as the same would have been held by us, had this assignment not been made;

AND, we hereby warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements either written, oral, or implied with respect to the aforesaid application for Letters Patent which will impair, diminish, limit, or abridge the interest herein conveyed at the time of the execution of this instrument by us;

AND, we hereby agree to execute any and all applications for Letters Patent in the United States of America and foreign countries, and to furnish and deliver to the Secretary, Department of Health and Human Services, upon request, all data and documents, and to execute any papers which may be necessary for the prosecution of any application or applications of Letters Patent or for THE GOVERNMENT to exercise its rights granted hereunder, including communicating to THE GOVERNMENT, its representatives or agents, any facts relating to said invention, including evidence for interference purposes, or for other proceedings, whenever requested, to testify in any interference or other proceedings, whenever requested, and to execute and deliver on request all lawful papers required to make any of the foregoing provisions effective, and likewise make these provisions binding upon our heirs, legal representatives, administrators and assigns, and we shall assist THE GOVERNMENT in every way as may be requested in protecting said invention, provided that any expense of extending such assistance shall be paid by THE GOVERNMENT.

The undersigned hereby grants THE GOVERNMENT or the law firm of Townsend and Townsend and Crew LLP, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

PATENT REEL: 029553 FRAME: 0249

U.S. Patent Application Serial No. 13/641,655

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated. $\frac{|1|\partial \overline{7}|}{(\text{date})}$ Nancy J/ STATE OF COUNTY OF mtamer UNITED STATES OF AMERICA NN 17, JUL, before me, Aniarie A) I I I IIII (A On (here insert name and title of the officer), personally appeared Nancy J. Sullivan, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, execute the instrument. WITNESS my hand and official seal. Signature MONIQUE C. YOUNG Notary Public Prince George's County Maryland My Commission Expires Oct. 7. 2016 SIGNATURE WITNESSED BY:

(1) Date:__

Signature of Witness 1

(2) Date:____

Signature of Witness 2

Ole Gary J. Nabel (date) Mannand STATE OF WW.MM COUNTY OF UNITED STATES OF AMERICA M. J. JUL, before me, Muna On (here insert name and title of the officer), personally appeared Gary J. Nabel, personal known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, execute the instrument. WITNESS my hand and official seal. MONIQUE C. YOUNG Signature _ Notary Public Prince George's County Maryland My Commission Expires Oct. 7, 2016 (Seal) SIGNATURE WITNESSED BY: (1) Date: Signature of Witness 1 (2) Date: Signature of Witness 2

| <u>Clement Asiedu</u> | (date) |
|---|---|
| STATE OF <u>MD</u>) | |
| COUNTY OF MONTGOMERY | |
| UNITED STATES OF AMERICA On, before me, the officer), personally appeared <u>Clement Asiedu</u> , personally basis of satisfactory evidence) to be the person(s) whose na instrument and acknowledged to me that he/she/they execute capacity(ies), and that by his/her/their signature(s) on the in upon behalf of which the person(s) acted, execute the instrument | the same in his/her/their authorized hstrument the person(s), or the entity |
| WITNESS my hand and official seal. MONIQUE C. YOUNG Notary Public Prince George's County Maryland My Commission Expires Oct. 7, 2016 | ruigue Jonning. |
| (Seal) My commission Expires Oct. 7, 2010 | |
| SIGNATURE WITNESSED BY: | |
| (1) Date: Signatu | re of Witness 1 |
| (2) Date: | · |
| Signatu | re of Witness 2 |

PATENT REEL: 029553 FRAME: 0252

Cheng Cheng

Nov20 20/2 (date)

STATE OF Mary land COUNTY OF Ment gomery

UNITED STATES OF AMERICA

On NAWAWW U My before me, WALLAND . (here insert name and title of the officer), personally appeared Cheng Cheng, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, execute the instrument.

WITNESS my hand and official seal.



Signature Muliful

SIGNATURE WITNESSED BY:

(1) Date:__

Signature of Witness 1

(2) Date:

Signature of Witness 2

64612026V.1