

Form PTO-1595 (Rev. 03-09)
OMB No. 0651-0027 (exp. 03/31/2009)

U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

MALABI VENKATESAN
RYAN RANALLO
SHOSHANA BARNOY

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) 6/30/2008; 6/30/2008; 6/30/2008

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

2. Name and address of receiving party(ies)

Name: UNITED STATES ARMY

Internal Address: U.S. ARMY MEDICAL RESEARCH AND

MATERIEL COMMAND

Street Address: 504 SCOTT STREET

FORT DETRICK

City: FREDERICK

State: MARYLAND

Country: U.S.A. Zip 21702-5012

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application or patent number(s):

☐ This document is being filed together with a new application.

A. Patent Application No.(s)

B. Patent No.(s)

12/149,076 filed 04/25/2008

Additional numbers attached? ☐ Yes ☒ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: ELIZABETH ARWINE

Internal Address: U.S. ARMY MEDICAL RESEARCH AND

MATERIEL COMMAND

Street Address: 504 SCOTT STREET

FORT DETRICK

City: FREDERICK

State: MARYLAND Zip: 1702-5012

Phone Number: 301-619-7808

Fax Number: 301-619-5034

Email Address: ELIZABETH.ARWINE@AMEDD.ARMY.MIL

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- ☒ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number 21.0380

Authorized User Name ELIZABETH ARWINE

9. Signature:

Elizabeth Arwine
Signature

8 January 2010
Date

ELIZABETH ARWINE, REG. NO. 45,867

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

4

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

700426676

PATENT
REEL: 023757 FRAME: 0994

CH \$40.00 210380 12149076

ASSIGNMENT OF INVENTION

Title of Invention: COMBINATIONS OF GENE DELETIONS FOR LIVE ATTENUATED SHIGELLA VACCINE STRAINS

Inventors: MALABI VENKATESAN; RYAN RANALLO; SHOSHANA BARNOY

Dates Oath Executed:

Application Serial Nos.: U.S. Provisional Patent Application Number 60/907,974 filed 04/25/2007; U.S. Patent Application Number 12/149,076 and International Patent Application Number PCT/US2008/005342 filed 04/25/2008

We, the undersigned inventors, in consideration of the rights of the Government of the United States acquired by virtue of the circumstances under which the above-entitled invention was made, hereby:

1. Assign to the Government of the United States, as represented by the Secretary of the Army, the entire right, title, and interest throughout the United States, its Territories, Possessions, and Puerto Rico, in and to the above-entitled invention and application for patent all Letters Patent issuing thereon, and any continuation, continuation-in-part, or division of said application and any reissue of extension of said Letters Patent.
2. Assign to the Government all right, title, and interest in the invention in those foreign countries in which the Government determines to cause an application to be filed, including but not limited to Australia, Canada, Mexico, Japan and the countries of the European Union.
3. Agree to provide any further information within our knowledge and to execute any further documents necessary to the prosecution of patent applications on the invention, the prosecution of interference's, and recording of title of patent applications and patents issuing thereon.

Inventor's Signature: *Malabi Venkatesan*

Date: 6/30/2008

Typed Name of Inventor: MALABI VENKATESAN

STATE OF Maryland

COUNTY OF Montgomery

On the above date MALABI VENKATESAN known to me to be the individual described in and who executed the foregoing instrument duly appeared before me and acknowledged to me that the same as his own free act and deed.

(SEAL)

Patricia A. Reay
NOTARY PUBLIC

My Commission expires on _____

ASSIGNMENT OF INVENTION

Title of Invention: COMBINATIONS OF GENE DELETIONS FOR LIVE ATTENUATED SHIGELLA VACCINE STRAINS

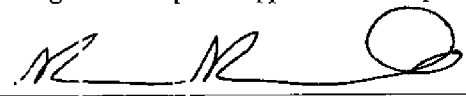
Inventors: MALABI VENKATESAN; RYAN RANALLO; SHOSHANA BARNOY

Dates Oath Executed:

Application Serial Nos.: U.S. Provisional Patent Application Number 60/907,974 filed 04/25/2007; U.S. Patent Application Number 12/149,076 and International Patent Application Number PCT/US2008/005342 filed 04/25/2008

We, the undersigned inventors, in consideration of the rights of the Government of the United States acquired by virtue of the circumstances under which the above-entitled invention was made, hereby:

1. Assign to the Government of the United States, as represented by the Secretary of the Army, the entire right, title, and interest throughout the United States, its Territories, Possessions, and Puerto Rico, in and to the above-entitled invention and application for patent all Letters Patent issuing thereon, and any continuation, continuation-in-part, or division of said application and any reissue of extension of said Letters Patent.
2. Assign to the Government all right, title, and interest in the invention in those foreign countries in which the Government determines to cause an application to be filed, including but not limited to Australia, Canada, Mexico, Japan and the countries of the European Union.
3. Agree to provide any further information within our knowledge and to execute any further documents necessary to the prosecution of patent applications on the invention, the prosecution of interference's, and recording of title of patent applications and patents issuing thereon.

Inventor's Signature: 

Date: 6/30/08 Typed Name of Inventor: RYAN RANALLO

STATE OF Maryland

COUNTY OF Montgomery

On the above date RYAN RANALLO known to me to be the individual described in and who executed the foregoing instrument duly appeared before me and acknowledged to me that the same as his own free act and deed.

(SEAL)


NOTARY PUBLIC

My Commission expires on

ASSIGNMENT OF INVENTION

Title of Invention: COMBINATIONS OF GENE DELETIONS FOR LIVE ATTENUATED SHIGELLA VACCINE STRAINS

Inventors: MALABI VENKATESAN; RYAN RANALLO; SHOSHANA BARNOY

Dates Oath Executed:

Application Serial Nos.: U.S. Provisional Patent Application Number 60/907,974 filed 04/25/2007; U.S. Patent Application Number 12/149,076 and International Patent Application Number PCT/US2008/005342 filed 04/25/2008

We, the undersigned inventors, in consideration of the rights of the Government of the United States acquired by virtue of the circumstances under which the above-entitled invention was made, hereby:

1. Assign to the Government of the United States, as represented by the Secretary of the Army, the entire right, title, and interest throughout the United States, its Territories, Possessions, and Puerto Rico, in and to the above-entitled invention and application for patent all Letters Patent issuing thereon, and any continuation, continuation-in-part, or division of said application and any reissue of extension of said Letters Patent.
2. Assign to the Government all right, title, and interest in the invention in those foreign countries in which the Government determines to cause an application to be filed, including but not limited to Australia, Canada, Mexico, Japan and the countries of the European Union.
3. Agree to provide any further information within our knowledge and to execute any further documents necessary to the prosecution of patent applications on the invention, the prosecution of interference's, and recording of title of patent applications and patents issuing thereon.

Inventor's Signature: Shoshana Barney

Date: 6/30/08 Typed Name of Inventor: SHOSHANA BARNOY

STATE OF Maryland

COUNTY OF Montgomery

On the above date SHOSHANA BARNOY known to me to be the individual described in and who executed the foregoing instrument duly appeared before me and acknowledged to me that the same as his own free act and deed.

(SEAL)

Patricia A. Lacey
NOTARY PUBLIC

My Commission Expires
May 27, 2012

My Commission expires on _____