

03-08-2000



101284629

Docket No. 1758-4036US2

MWD
2.7.00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : MINETTI C., et al. Group Art Unit : 1641
 Serial No. : 09/120,044 Examiner : DEVI, S.
 Filed : July 21, 1998
 For : **MODIFIED IMMUNOGENIC PNEUMOLYSIN COMPOSITIONS AS VACCINES**

RECORDATION FORM COVER SHEET PURSUANT TO 37 C.F.R. § 3.31

Hon. Commissioner of Patents and Trademarks
BOX ASSIGNMENTS
Washington, D.C. 20231

Sir:

Please record the attached original documents or copy thereof.

1. Name of conveying party/parties:

- Conceicao MINETTI - 14 Kathryn Street, Clark, New Jersey 07066, U.S.A.
- Francis MICHON - 4401 Rosedale Avenue, Bethesda, Maryland 20814, U.S.A.
- Jeffrey K. PULLEN - 6928 Garland Lane, Columbia, Maryland 21045, U.S.A.
- Mary Ellen POLVINO-BODNAR - 621 Rolling Dale Road, Annapolis, Maryland 21401, U.S.A.
- Shu-Mei LIANG - 2nd Floor, No. 48, Section 2, Academia Sinica Road, Nankang, Taipei 114 Taiwan, ROC
- Joseph Y. TAI - 1635 Limekiln Pike, Dresher, Pennsylvania 19025-1041, U.S.A.

2. Name and address of receiving party/parties:

Name North American Vaccine, Inc.

Internal Address: _____

Street Address: 10150 Old Columbia Road

City Columbia State Maryland ZIP 21046

Name _____

Internal Address: _____

Street Address: _____

City _____ State _____ ZIP _____

[] Additional names and addresses attached.

44-1515-10000102 0912044
 40.00 OP /
 03/07/2000 JSH/DBZ 0000102 0912044
 FT:501

3. Name of conveyance: Assignment Merger Security Agreement
 Change of Name Other _____
Execution Date: November 5, 1999; November 19, 1999; November 24, 1999;
December 1, 1999; December 8, 1999; January 19, 2000

4. Application Number(s) or Patent Number(s):
 This document is being filed together with a new application which was executed on _____.
 Patent Application No.(s) 09/120,044
 Patent No.(s) _____

5. Address all future communications to:
MORGAN & FINNEGAN, L.L.P.
345 Park Avenue
New York, New York 10154

6. Total number of applications and patents involved: one

7. Total fee (37 CFR §3.41): \$40.00 property x 1 property(ies) = \$40.00

- A check in the amount of \$40.00 to cover the recordation fee is enclosed.
- Charge fee to Deposit Account No. 13-4500. Order No. _____.
- The Commissioner is hereby authorized to charge any additional fees which may be required for this recordation, or credit any overpayment to Deposit Account No. 13-4500. Order No. 1758-4036US2.

8. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Respectfully submitted,
MORGAN & FINNEGAN, L.L.P.

Darryl H. Steensma
Darryl H. Steensma
Registration No. 43,155

Dated: February 3, 2000

CORRESPONDENCE ADDRESS: Total number of pages including the recordation cover sheet 32

MORGAN & FINNEGAN, L.L.P.
345 Park Avenue
New York, New York 10154
(212) 758-4800 / (212) 751-6849 Facsimile

FORM: REC-PAT.NY / Rev. 05/26/98

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

CONCEICAO MINETTI – 14 Kathryn Street, Clark, New Jersey 07066, U.S.A.FRANCIS MICHON – 4401 Rosedale Avenue, Bethesda, Maryland 20814, U.S.A.JEFFREY K. PULLEN – 6928 Garland Lane, Columbia, Maryland 21045, U.S.A.MARY ELLEN POLVINO-BODNAR – 621 Rolling Dale Road, Annapolis, Maryland 21401, U.S.A.SHU-MEI LIANG – 2nd Floor, No. 48, Section 2 Academia Sinica Road, Nankang, Taipei – 115 TaiwanJOSEPH Y. TAI – 1635 Limekiln Pike, Dresher, Pennsylvania 19025-1041 U.S.A.

(full name(s) and post office address(s) of inventor(s) (including country))

(hereinafter referred to as ASSIGNOR(S)), has made a discovery or invention entitled:

MODIFIED IMMUNOGENIC PNEUMOLYSIN COMPOSITIONS AS VACCINES

(title of discovery or invention)

 for which application for Letters Patent of the United States has been executed on even date herewith, for which application for Letters Patent of the United States has been filed on July 21, 1998, under Serial No. 09/120,044, and

WHEREAS:

NORTH AMERICAN VACCINE, INC. – 10150 OLD COLUMBIA ROAD, COLUMBIA, MARYLAND 21046

(name and address of assignee)

(hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

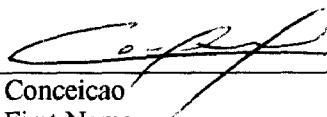
NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR(S) of the sum of One Dollar (\$ 1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said discovery or invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted.

I, SAID ASSIGNOR(S), hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and any Official of any country or countries foreign to the United States of America whose duty it is to issue Letters Patent on applications as aforesaid, to issue all such Letters Patent for said discovery or invention to the ASSIGNEE, as assignee of the entire right, title and interest in, to and under the same, for the sole use and behalf of the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

I, SAID, ASSIGNOR(S), hereby covenant that I have full right to convey the entire right, title and interest herein sold, assigned, transferred and set over;

AND I, SAID ASSIGNOR(S) hereby further covenant and agree that the ASSIGNEE, its successors, legal representatives, or assigns, may apply for foreign Letters Patent on said discovery or invention and claim the benefits of the International Convention, and that I will, at any time, when called upon to do so by the ASSIGNEE, its successors, legal representatives, or assigns, communicate to the ASSIGNEE, its successors, legal representatives, or assigns, as the case may be, any facts known to me respecting said discovery or invention, and execute and deliver any and all lawful papers that may be necessary or desirable to perfect the title to the said discovery or invention, the said applications and the said Letters Patent in the ASSIGNEE, its successors, legal representatives and assigns, and that if reissues of the said Letters Patent or disclaimers relating thereto, or divisions, continuations, or refilings of the said applications, or any thereof, shall hereafter be desired by the ASSIGNEE, its successors, legal representatives, or assigns, I will, at any time, when called up to do so by the ASSIGNEE, its successors, legal representatives, or assigns sign all lawful papers, make all rightful oaths, execute and deliver all such disclaimers and all divisional, continuation and reissue applications so desired, and do all lawful acts requisite for the application for such reissues and the procuring thereof and for the filing of such disclaimers and such applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention or discover in all countries, and without further compensation but at the expense of the ASSIGNEE, its successors, legal representatives and assigns.

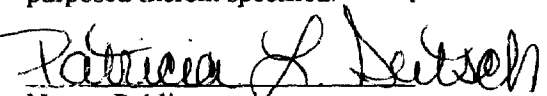
Assignor's signature: 
Conceicao Minetti
First Name Middle initial Last name

Citizenship: Brazil

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 10th day of January 2000.

STATE OF New Jersey
COUNTY OF Somerset

On this 10th day of January 2000, before me, the undersigned authority, personally appeared to me
CONCEICAO MINETTI
known and known to me to be the individual who is described in and who executed the foregoing Assignment, and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and purposed therein specified.


Notary Public

PATRICIA L. DEITSCH
NOTARY PUBLIC OF NEW JERSEY
My Commission Exp. May 21, 2002

Assignor's signature: _____
Francis Michon
First Name Middle initial Last name

Citizenship: Canada

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
FRANCIS MICHON
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: _____
Jeffrey K. Pullen
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
JEFFREY K. PULLEN
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

CONCEICAO MINETTI – 3904 Isbell Street, Silver Spring, Maryland 20906, U.S.A.FRANCIS MICHON – 4401 Rosedale Avenue, Bethesda, Maryland 20814, U.S.A.JEFFREY K. PULLEN – 6928 Garland Lane, Columbia, Maryland 21045, U.S.A.MARY ELLEN POLVINO-BODNAR – 621 Rolling Dale Road, Annapolis, Maryland 21401, U.S.A.SHU-MEI LIANG – 2nd Floor, No. 48, Section 2 Academia Sinica Road, Nankang, Taipei – 115 TaiwanJOSEPH Y. TAI – 1530 Kriebel Mill Road, Collegeville, Pennsylvania 19426, U.S.A.(full name(s) and post office address(s) of inventor(s) (including country))

(hereinafter referred to as ASSIGNOR(S)), has made a discovery or invention entitled:

MODIFIED IMMUNOGENIC PNEUMOLYSIN COMPOSITIONS AS VACCINES(title of discovery or invention)

[] for which application for Letters Patent of the United States has been executed on even date herewith,

[X] for which application for Letters Patent of the United States has been filed on July 21, 1998, under Serial No. 09/120,044, and

WHEREAS:

NORTH AMERICAN VACCINE, INC. – 10150 OLD COLUMBIA ROAD, COLUMBIA, MARYLAND 21046(name and address of assignee)

(hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR(S) of the sum of One Dollar (\$ 1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said discovery or invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted.

Assignor's signature: _____
Mary Ellen Polvino-Bodnar
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
) ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared to me
 MARY ELLEN POLVINO-BODNAR
known and known to me to be the individual who is described in and who executed the foregoing Assignment, and
who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: _____
Shu-Mei Liang
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
) ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
 SHU-MEI LIANG
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

CONCEICAO MINETTI – 3904 Isbell Street, Silver Spring, Maryland 20906, U.S.A.FRANCIS MICHON – 4401 Rosedale Avenue, Bethesda, Maryland 20814, U.S.A.JEFFREY K. PULLEN – 6928 Garland Lane, Columbia, Maryland 21045, U.S.A.MARY ELLEN POLVINO-BODNAR – 621 Rolling Dale Road, Annapolis, Maryland 21401, U.S.A.SHU-MEI LIANG – 2nd Floor, No. 48, Section 2 Academia Sinica Road, Nankang, Taipei – 115 TaiwanJOSEPH Y. TAI – 1635 Limekiln Pike, Dresher, Pennsylvania 19025-1041 U.S.A.(full name(s) and post office address(s) of inventor(s) (including country))

(hereinafter referred to as ASSIGNOR(S)), has made a discovery or invention entitled:

MODIFIED IMMUNOGENIC PNEUMOLYSIN COMPOSITIONS AS VACCINES(title of discovery or invention) for which application for Letters Patent of the United States has been executed on even date herewith, for which application for Letters Patent of the United States has been filed on July 21, 1998, under Serial No. 09/120,044, and

WHEREAS:

NORTH AMERICAN VACCINE, INC. – 10150 OLD COLUMBIA ROAD, COLUMBIA, MARYLAND 21046(name and address of assignee)

(hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR(S) of the sum of One Dollar (\$ 1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said discovery or invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted.

Assignor's signature: _____
Francis Michon
First Name Middle initial Last name

Citizenship: Canada

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
FRANCIS MICHON
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: _____
Jeffrey K. Pullen Nov. 24, 1999
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
JEFFREY K. PULLEN
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: _____
Mary Ellen Polvino-Bodnar
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared to me
MARY ELLEN POLVINO-BODNAR
known and known to me to be the individual who is described in and who executed the foregoing Assignment, and
who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: _____
Shu-Mei Liang
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
SHU-MEI LIANG
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

CONCEICAO MINETTI – 3904 Isbell Street, Silver Spring, Maryland 20906, U.S.A.

FRANCIS MICHON – 4401 Rosedale Avenue, Bethesda, Maryland 20814, U.S.A.

JEFFREY K. PULLEN – 6928 Garland Lane, Columbia, Maryland 21045, U.S.A.

MARY ELLEN POLVINO-BODNAR – 621 Rolling Dale Road, Annapolis, Maryland 21401, U.S.A.

SHU-MEI LIANG – 2nd Floor, No. 48, Section 2 Academia Sinica Road, Nankang, Taipei – 115 Taiwan

JOSEPH Y. TAI – 1635 Limekiln Pike, Dresher, Pennsylvania 19025-1041 U.S.A.

(full name(s) and post office address(s) of inventor(s) (including country))

(hereinafter referred to as ASSIGNOR(S)), has made a discovery or invention entitled:

MODIFIED IMMUNOGENIC PNEUMOLYSIN COMPOSITIONS AS VACCINES

(title of discovery or invention)

[] for which application for Letters Patent of the United States has been executed on even date herewith,

[X] for which application for Letters Patent of the United States has been filed on July 21, 1998, under Serial No. 09/120,044, and

WHEREAS:

NORTH AMERICAN VACCINE, INC. – 10150 OLD COLUMBIA ROAD, COLUMBIA, MARYLAND 21046

(name and address of assignee)

(hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR(S) of the sum of One Dollar (\$ 1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said discovery or invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted.

Assignor's signature: _____
Francis Michon
First Name Middle initial Last name

Citizenship: Canada

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
FRANCIS MICHON
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: _____
Jeffrey K. Pullen
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
JEFFREY K. PULLEN
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: Mary Ellen Polvino-Bodnar 12/8/99
Mary Ellen Polvino-Bodnar
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared to me
MARY ELLEN POLVINO-BODNAR
known and known to me to be the individual who is described in and who executed the foregoing Assignment, and
who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: _____
Shu-Mei Liang
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
SHU-MEI LIANG
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

CONCEICAO MINETTI – 3904 Isbell Street, Silver Spring, Maryland 20906, U.S.A.

FRANCIS MICHON – 4401 Rosedale Avenue, Bethesda, Maryland 20814, U.S.A.

JEFFREY K. PULLEN – 6928 Garland Lane, Columbia, Maryland 21045, U.S.A.

MARY ELLEN POLVINO-BODNAR – 621 Rolling Dale Road, Annapolis, Maryland 21401, U.S.A.

SHU-MEI LIANG – 2nd Floor, No. 48, Section 2 Academia Sinica Road, Nankang, Taipei – 115 Taiwan

JOSEPH Y. TAI – 1635 Limekiln Pike, Dresher, Pennsylvania 19025-1041 U.S.A.

(full name(s) and post office address(s) of inventor(s) (including country))

(hereinafter referred to as ASSIGNOR(S)), has made a discovery or invention entitled:

MODIFIED IMMUNOGENIC PNEUMOLYSIN COMPOSITIONS AS VACCINES

(title of discovery or invention)

[] for which application for Letters Patent of the United States has been executed on even date herewith,

[X] for which application for Letters Patent of the United States has been filed on July 21, 1998, under Serial No. 09/120,044, and

WHEREAS:

NORTH AMERICAN VACCINE, INC. – 10150 OLD COLUMBIA ROAD, COLUMBIA, MARYLAND 21046

(name and address of assignee)

(hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR(S) of the sum of One Dollar (\$ 1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said discovery or invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted.

Assignor's signature: _____
Francis Michon
First Name Middle initial Last name

Citizenship: Canada

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
FRANCIS MICHON
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: _____
Jeffrey K. Pullen
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
JEFFREY K. PULLEN
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: _____
Mary Ellen Polvino-Bodnar
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
) ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared to me
MARY ELLEN POLVINO-BODNAR
known and known to me to be the individual who is described in and who executed the foregoing Assignment, and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and purposed therein specified.

Notary Public

Assignor's signature: X Shu-Mei Liang
Shu-Mei Liang
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 1st day of ^{S.L.}~~November~~ ^{Dec.}, 1999.

STATE OF N. J.)
) ss.:
COUNTY OF Middlesex)

On this 1st day of ~~November~~ ^{Dec.}, 1999, before me, the undersigned authority, personally appeared
SHU-MEI LIANG
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment, and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and purposed therein specified.

[Signature]
Notary Public

FRANK SHEN
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Dec. 11, 1999

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

CONCEICAO MINETTI – 3904 Isbell Street, Silver Spring, Maryland 20906, U.S.A.

FRANCIS MICHON – 4401 Rosedale Avenue, Bethesda, Maryland 20814, U.S.A.

JEFFREY K. PULLEN – 6928 Garland Lane, Columbia, Maryland 21045, U.S.A.

MARY ELLEN POLVINO-BODNAR – 621 Rolling Dale Road, Annapolis, Maryland 21401, U.S.A.

SHU-MEI LIANG – 2nd Floor, No. 48, Section 2 Academia Sinica Road, Nankang, Taipei – 115 Taiwan

JOSEPH Y. TAI – 1635 Limekiln Pike, Dresher, Pennsylvania 19025-1041 U.S.A.

(full name(s) and post office address(s) of inventor(s) (including country))

(hereinafter referred to as ASSIGNOR(S)), has made a discovery or invention entitled:

MODIFIED IMMUNOGENIC PNEUMOLYSIN COMPOSITIONS AS VACCINES

(title of discovery or invention)

[] for which application for Letters Patent of the United States has been executed on even date herewith,

[X] for which application for Letters Patent of the United States has been filed on July 21, 1998, under Serial No. 09/120,044, and

WHEREAS:

NORTH AMERICAN VACCINE, INC. – 10150 OLD COLUMBIA ROAD, COLUMBIA, MARYLAND 21046

(name and address of assignee)

(hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that in consideration of the payment by ASSIGNEE to ASSIGNOR(S) of the sum of One Dollar (\$ 1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said discovery or invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted.

Assignor's signature: _____
Francis Michon
First Name Middle initial Last name

Citizenship: Canada

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
FRANCIS MICHON
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: _____
Jeffrey K. Pullen
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
JEFFREY K. PULLEN
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment,
and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and
purposed therein specified.

Notary Public

Assignor's signature: _____
Mary Ellen Polvino-Bodnar
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
 ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared to me
MARY ELLEN POLVINO-BODNAR
known and known to me to be the individual who is described in and who executed the foregoing Assignment, and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and purposed therein specified.

Notary Public

Assignor's signature: _____
Shu-Mei Liang
First Name Middle initial Last name

Citizenship: United States of America

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this _____ day of November, 1999.

STATE OF)
 ss.:
COUNTY OF)

On this _____ day of November, 1999, before me, the undersigned authority, personally appeared
SHU-MEI LIANG
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment, and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and purposed therein specified.

Notary Public

