

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5687999

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ALLISON D. ORTIGOSA	03/03/2015
MICHAEL P. COLEMAN	03/09/2015
SHIBU T. GEORGE	03/03/2015
MICHAEL A. RAUSCHER	02/26/2015
MARK C. SLEEVI	03/03/2015
KARTOA CHOW	03/05/2015
RECEIVING PARTY DATA	
Name:	MERCK SHARP & DOHME CORP.
Street Address:	126 EAST LINCOLN AVENUE
City:	RAHWAY
State/Country:	NEW JERSEY
Postal Code:	07065
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16551974
CORRESPONDENCE DATA	
Fax Number:	(732)594-4720
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	732-594-6914
Email:	US-DOCKET-PATENT@merck.com
Correspondent Name:	MERCK
Address Line 1:	P O BOX 2000
Address Line 2:	RY86-2011A
Address Line 4:	RAHWAY, NEW JERSEY 07065-0907
ATTORNEY DOCKET NUMBER:	23742
NAME OF SUBMITTER:	JOHN DAVID REILLY
SIGNATURE:	/John David Reilly, Reg. #43039/
DATE SIGNED:	08/27/2019

Total Attachments: 21

source=23742-ASSIGN-27AUG2019#page1.tif

source=23742-ASSIGN-27AUG2019#page2.tif

source=23742-ASSIGN-27AUG2019#page3.tif

source=23742-ASSIGN-27AUG2019#page4.tif

source=23742-ASSIGN-27AUG2019#page5.tif

source=23742-ASSIGN-27AUG2019#page6.tif

source=23742-ASSIGN-27AUG2019#page7.tif

source=23742-ASSIGN-27AUG2019#page8.tif

source=23742-ASSIGN-27AUG2019#page9.tif

source=23742-ASSIGN-27AUG2019#page10.tif

source=23742-ASSIGN-27AUG2019#page11.tif

source=23742-ASSIGN-27AUG2019#page12.tif

source=23742-ASSIGN-27AUG2019#page13.tif

source=23742-ASSIGN-27AUG2019#page14.tif

source=23742-ASSIGN-27AUG2019#page15.tif

source=23742-ASSIGN-27AUG2019#page16.tif

source=23742-ASSIGN-27AUG2019#page17.tif

source=23742-ASSIGN-27AUG2019#page18.tif

source=23742-ASSIGN-27AUG2019#page19.tif

source=23742-ASSIGN-27AUG2019#page20.tif

source=23742-ASSIGN-27AUG2019#page21.tif

Worldwide Assignment

Attorney Docket No.: 23742

WORLDWIDE ASSIGNMENT

23742
JL

WHEREAS, I/WE,

- | | | | | |
|-----|----------------------------|------------|--------------------------|--------------|
| (1) | <u>Allison D. Ortigosa</u> | located at | <u>Elkton, VA</u> | <u>22827</u> |
| (2) | <u>Michael P. Coleman</u> | located at | <u>Louisville, CO</u> | <u>80027</u> |
| (3) | <u>Shibu T. George</u> | located at | <u>Thornton, CO</u> | <u>80602</u> |
| (4) | <u>Michael A. Rauscher</u> | located at | <u>Garwood, NJ</u> | <u>07027</u> |
| (5) | <u>Mark C. Slezvi</u> | located at | <u>Longmont, CO</u> | <u>80503</u> |
| (6) | <u>Kartoa Chow</u> | located at | <u>San Francisco, CA</u> | <u>94102</u> |

(hereinafter ASSIGNOR(S)), is/are the inventor(s) of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the Invention:

PURIFYING INSULIN USING CATION EXCHANGE AND REVERSE PHASE CHROMATOGRAPHY IN THE PRESENCE OF AN ORGANIC MODIFIER AND ELEVATED TEMPERATURE

and in the following application(s):

- U.S. Provisional Application No. 61/953,001 filed on 03/14/2014;
U.S. Application No. 15/124,080 having a filing date of 9/7/2016; and
PCT International Application No. PCT/US15/19864 having a filing date of 3/11/2015.

WHEREAS I/WE covenant that the rights and property herein conveyed are free and clear of any encumbrance, and that I/we have the full right to convey the same as herein expressed.

WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter ASSIGNEE), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/we, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said ASSIGNEE my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of ASSIGNEE, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND I/WE HEREBY covenant and agree that we will at any time, upon the request and at the expense of ASSIGNEE, without further compensation or charge to said ASSIGNEE, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, reissues, renewals and extensions thereof in the name of ASSIGNEE, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

I/WE HEREBY authorize ASSIGNEE to insert in this instrument the Application Number(s) and the filing date(s) of said application for Patents when officially notified thereof.

This document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such components shall together constitute but one and the same document.

23742
OK

Executed this 03 day of March, 2015

Allison D. Ortigosa

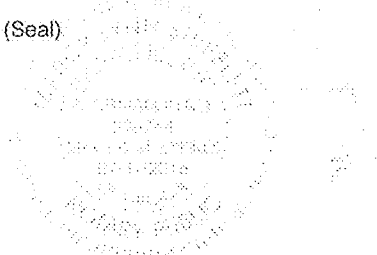
ALLISON D. ORTIGOSA

ACKNOWLEDGEMENT

State of Virginia)
County of Bedford) s.s.:

On this 3rd day of March, 2015 personally appeared before me ALLISON D. ORTIGOSA to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)



Mary Lynn Subject
Notary Public

Executed this _____ day of _____, 20_____.

MICHAEL P. COLEMAN

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this _____ day of _____, 20____, personally appeared before me MICHAEL P. COLEMAN to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Worldwide Assignment

Attorney Docket No. ~~23742~~ 23742 *SM*

Executed this _____ day of _____, 20____

ALLISON D. ORTIGOSA

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this _____ day of _____, 20____, personally appeared before me ALLISON D. ORTIGOSA to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this 9th day of March, 2015

M P Coleman
MICHAEL P. COLEMAN

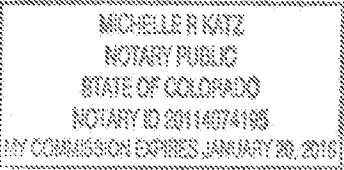
ACKNOWLEDGEMENT

State of Colorado)
County of Boulder) s.s.:

On this 9th day of March, 2015, personally appeared before me MICHAEL P. COLEMAN to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Michelle R Katz
Notary Public



23742 ~~23472~~

Executed this ____ day of _____, 20____.

SHIBU T. GEORGE

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20____, personally appeared before me SHIBU T. GEORGE to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this ____ day of _____, 20____.

MICHAEL A. RAUSCHER

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20____, personally appeared before me MICHAEL A. RAUSCHER to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this ____ day of _____, 20__.

MARK C. SLEEV

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20__, personally appeared before me **MARK C. SLEEV** to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this ____ day of _____, 20__.

KARTOA CHOW

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20__, personally appeared before me **KARTOA CHOW** to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Worldwide Assignment

Attorney Docket No.: 23472

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,

(1)	<u>Allison D. Ortigosa</u>	located at	<u>Elkton, VA</u>	<u>22827</u>
(2)	<u>Michael P. Coleman</u>	located at	<u>Louisville, CO</u>	<u>80027</u>
(3)	<u>Shibu T. George</u>	located at	<u>Thornton, CO</u>	<u>80602</u>
(4)	<u>Michael A. Rauscher</u>	located at	<u>Garwood, NJ</u>	<u>07027</u>
(5)	<u>Mark C. Sleevi</u>	located at	<u>Longmont, CO</u>	<u>80503</u>
(6)	<u>Kartoa Chow</u>	located at	<u>San Francisco, CA</u>	<u>94102</u>

(hereinafter ASSIGNOR(S)), is/are the inventor(s) of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the Invention:

PURIFYING INSULIN USING CATION EXCHANGE AND REVERSE PHASE CHROMATOGRAPHY IN THE PRESENCE OF AN ORGANIC MODIFIER AND ELEVATED TEMPERATURE

and in the following application(s):

U.S. Provisional Application No. 61/953,001 filed on 03/14/2014;
U.S. Application No. 15/124,080 having a filing date of 9/7/2016; and
PCT International Application No. PCT/US15/19864 having a filing date of 3/11/2015.

WHEREAS I/WE covenant that the rights and property herein conveyed are free and clear of any encumbrance, and that I/we have the full right to convey the same as herein expressed.

WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter ASSIGNEE), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/we, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said ASSIGNEE my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of ASSIGNEE, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND I/WE HEREBY covenant and agree that we will at any time, upon the request and at the expense of ASSIGNEE, without further compensation or charge to said ASSIGNEE, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, reissues, renewals and extensions thereof in the name of ASSIGNEE, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

I/WE HEREBY authorize ASSIGNEE to insert in this instrument the Application Number(s) and the filing date(s) of said application for Patents when officially notified thereof.

This document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such components shall together constitute but one and the same document.

Worldwide Assignment

Attorney Docket No. ~~23472~~
23742 *st*

Executed this ____ day of _____, 20__.

ALLISON D. ORTIGOSA

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20__, personally appeared before me **ALLISON D. ORTIGOSA** to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this ____ day of _____, 20__.

MICHAEL P. COLEMAN

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20__, personally appeared before me **MICHAEL P. COLEMAN** to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Worldwide Assignment

Attorney Docket No. ~~23472~~
23742-21

Executed this 03 day of March, 2015.

[Signature]
SHIBU T. GEORGE

ACKNOWLEDGEMENT

State of Colorado)
County of Boulder) s.s.:

On this 3rd day of March, 2015, personally appeared before me SHIBU T. GEORGE to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

JESSIE VINCENT
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20144010151
MY COMMISSION EXPIRES MARCH 5, 2018

[Signature]
Notary Public

Executed this _____ day of _____, 20____.

MICHAEL A. RAUSCHER

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this _____ day of _____, 20____, personally appeared before me MICHAEL A. RAUSCHER to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Worldwide Assignment

Attorney Docket No. ~~23472~~

23742 *JK*

Executed this ____ day of _____, 20__.

MARK C. SLEEVI

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20__, personally appeared before me **MARK C. SLEEVI** to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this ____ day of _____, 20__.

KARTOA CHOW

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20__, personally appeared before me **KARTOA CHOW** to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

23742 PK

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,

- (1) Allison D. Ortigosa located at Elkton, VA 22827
- (2) Michael P. Coleman located at Louisville, CO 80027
- (3) Shibu T. George located at Thornton, CO 80602
- (4) Michael A. Rauscher located at Garwood, NJ 07027
- (5) Mark C. Sleevi located at Longmont, CO 80503
- (6) Kartoa Chow located at San Francisco, CA 94102

(hereinafter ASSIGNOR(S)), is/are the inventor(s) of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the Invention:

PURIFYING INSULIN USING CATION EXCHANGE AND REVERSE PHASE CHROMATOGRAPHY IN THE PRESENCE OF AN ORGANIC MODIFIER AND ELEVATED TEMPERATURE

and in the following application(s):

- U.S. Provisional Application No. 61/953,001 filed on 03/14/2014;
- U.S. Application No. 15/124,080 having a filing date of 9/7/2016; and
- PCT International Application No. PCT/US15/19864 having a filing date of 3/11/2015.

WHEREAS I/WE covenant that the rights and property herein conveyed are free and clear of any encumbrance, and that I/we have the full right to convey the same as herein expressed.

WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter ASSIGNEE), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;


NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/we, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said ASSIGNEE my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of ASSIGNEE, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND I/WE HEREBY covenant and agree that we will at any time, upon the request and at the expense of ASSIGNEE, without further compensation or charge to said ASSIGNEE, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, reissues, renewals and extensions thereof in the name of ASSIGNEE, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

I/WE HEREBY authorize ASSIGNEE to insert in this instrument the Application Number(s) and the filing date(s) of said application for Patents when officially notified thereof.

This document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such components shall together constitute but one and the same document.

Worldwide Assignment

Attorney Docket No. ~~23072~~
23742 

Executed this ____ day of _____, 20____.

ALLISON D. ORTIGOSA

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20____, personally appeared before me ALLISON D. ORTIGOSA to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this ____ day of _____, 20____.

MICHAEL P. COLEMAN

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20____, personally appeared before me MICHAEL P. COLEMAN to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

23742

Executed this _____ day of _____, 20____.

SHIBU T. GEORGE

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this _____ day of _____, 20____, personally appeared before me SHIBU T. GEORGE to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this 26th day of February, 2015

[Signature]
MICHAEL A. RAUSCHER

ACKNOWLEDGEMENT

State of New Jersey
County of Union) s.s.:

On this 26th day of February, 2015, personally appeared before me MICHAEL A. RAUSCHER to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

[Signature]
Notary Public

DAWN A. SCOTT
NOTARY PUBLIC OF NEW JERSEY
I.D. # 2370672
My Commission Expires 3/31/2016

Worldwide Assignment

Attorney Docket No. ~~23472~~

23742 *[Signature]*

Executed this _____ day of _____, 20____.

MARK C. SLEEV

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this _____ day of _____, 20____, personally appeared before me MARK C. SLEEV to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this _____ day of _____, 20____.

KARTOA CHOW

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this _____ day of _____, 20____, personally appeared before me KARTOA CHOW to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Worldwide Assignment

Attorney Docket No.: 23472

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,

(1)	<u>Allison D. Ortigosa</u>	located at	<u>Elkton, VA</u>	<u>22827</u>
(2)	<u>Michael P. Coleman</u>	located at	<u>Louisville, CO</u>	<u>80027</u>
(3)	<u>Shibu T. George</u>	located at	<u>Thornton, CO</u>	<u>80602</u>
(4)	<u>Michael A. Rauscher</u>	located at	<u>Garwood, NJ</u>	<u>07027</u>
(5)	<u>Mark C. Sleevi</u>	located at	<u>Longmont, CO</u>	<u>80503</u>
(6)	<u>Karisa Chow</u>	located at	<u>San Francisco, CA</u>	<u>94102</u>

(hereinafter ASSIGNOR(S)), is/are the inventor(s) of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the Invention:

PURIFYING INSULIN USING CATION EXCHANGE AND REVERSE PHASE CHROMATOGRAPHY IN THE PRESENCE OF AN ORGANIC MODIFIER AND ELEVATED TEMPERATURE

and in the following application(s):

U.S. Provisional Application No. 61/953,001 filed on 03/14/2014;
U.S. Application No. 15/124,080 having a filing date of 9/7/2016; and
PCT International Application No. PCT/US15/19864 having a filing date of 3/11/2015.

WHEREAS I/WE covenant that the rights and property herein conveyed are free and clear of any encumbrance, and that I/we have the full right to convey the same as herein expressed.

WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter ASSIGNEE), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/we, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said ASSIGNEE my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of ASSIGNEE, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND I/WE HEREBY covenant and agree that we will at any time, upon the request and at the expense of ASSIGNEE, without further compensation or charge to said ASSIGNEE, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, reissues, renewals and extensions thereof in the name of ASSIGNEE, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

I/WE HEREBY authorize ASSIGNEE to insert in this instrument the Application Number(s) and the filing date(s) of said application for Patents when officially notified thereof.

This document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such components shall together constitute but one and the same document.

Worldwide Assignment

Attorney Docket No. ~~23472~~

23742

Executed this ____ day of _____, 20____.

ALLISON D. ORTIGOSA

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20____, personally appeared before me ALLISON D. ORTIGOSA to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this ____ day of _____, 20____.

MICHAEL P. COLEMAN

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20____, personally appeared before me MICHAEL P. COLEMAN to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Worldwide Assignment

Attorney Docket No. ~~2372~~

23742

Executed this _____ day of _____, 20____.

SHIBU T. GEORGE

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this _____ day of _____, 20____, personally appeared before me SHIBU T. GEORGE to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this _____ day of _____, 20____.

MICHAEL A. RAUSCHER

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this _____ day of _____, 20____, personally appeared before me MICHAEL A. RAUSCHER to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Worldwide Assignment

Attorney Docket No. ~~23472~~ 23742 *SPZ*

Executed this 3 day of MARCH, 2015

Mark C. Sleeve
MARK C. SLEEVI

ACKNOWLEDGEMENT

State Colorado of Colorado)
County of Boulder) s.s.:

On this 3rd day of March, 2015 personally appeared before me MARK C. SLEEVI to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

JESSIE VINCENT
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20144010151
MY COMMISSION EXPIRES MARCH 5, 2018

Jessie Vincent
Notary Public

Executed this ____ day of _____, 20____

KARTOA CHOW

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20____, personally appeared before me KARTOA CHOW to me known, and known by me to be the same person described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,

- (1) Allison D. Ortigosa, located at Harrisonburg, VA,
- (2) Michael P. Coleman, located at Boulder, CO,
- (3) Shibu T. George, located at Thornton, CO,
- (4) Michael A. Rauscher, located at Garwood, NJ,
- (5) Mark C. Sleeve, located at Boulder, CO,
- (6) Kartoa Chow, located at San Francisco, CA

are the inventors of the invention described in an application for Patents having the Attorney Docket Number indicated above and the following Title of the Invention:

PURIFYING INSULIN USING CATION EXCHANGE AND REVERSE PHASE CHROMATOGRAPHY IN THE PRESENCE OF AN ORGANIC MODIFIER AND ELEVATED TEMPERATURE

and in the following application(s):

U.S. Provisional Application No. 61/953,001 filed on March 14, 2014;
U.S. Application No. 15/124,080 having a filing date of 9/7/2016; and
PCT International Application No. PCT/US15/19864 having a filing date of 3/11/2015.

WHEREAS I/WE covenant that the rights and property herein conveyed are free and clear of any encumbrance, and that I/we have the full right to convey the same as herein expressed.

WHEREAS, Merck Sharp & Dohme Corp., a corporation organized under the laws of the State of New Jersey, having an office at 126 East Lincoln Avenue, Rahway, New Jersey 07065, and its successors, assigns and legal representatives (hereinafter **ASSIGNEE**), is desirous of obtaining the entire right, title and interest in, to and under the invention disclosed in said application or applications;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I/we, said ASSIGNOR(S), do each hereby sell, assign and transfer or confirm the grant and assignment to said **ASSIGNEE** my/our entire right, title and interest in all countries of the world in and to my/our invention described in said application for Patents, in and to the right to file patent applications in the name of **ASSIGNEE**, its designee, or in any or all of our names, at its election, on the aforesaid invention in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified application for Patents under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement relating to patents or intellectual property, in and to any and all Letters Patent that are granted from the aforesaid application for Patents, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said invention, and in and to any continuations, divisions, reexaminations, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said **ASSIGNEE**, to the full ends of the terms for which all Letters Patent therefore may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

AND I/WE HEREBY covenant and agree that we will at any time, upon the request and at the expense of **ASSIGNEE**, without further compensation or charge to said **ASSIGNEE**, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing invention, patent applications, and Letters Patent and continuations, divisions, reexaminations, reissues, renewals and extensions thereof in the name of **ASSIGNEE**, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein.

I/WE HEREBY authorize **ASSIGNEE** to insert in this instrument the Application Number(s) and the filing date(s) of said application for Patents when officially notified thereof.

This document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such components shall together constitute but one and the same document.

Executed this ____ day of _____, 20__.

Allison D. Ortigosa

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20__, personally appeared before me **Allison D. Ortigosa** to me known, and known by me to be the same person(s) described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this ____ day of _____, 20__.

Michael P. Coleman

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20__, personally appeared before me **Michael P. Coleman** to me known, and known by me to be the same person(s) described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this ____ day of _____, 20__.

Shibu T. George

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20__, personally appeared before me **Shibu T. George** to me known, and known by me to be the same person(s) described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this ____ day of _____, 20__.

Michael A. Rauscher

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20__, personally appeared before me **Michael A. Rauscher** to me known, and known by me to be the same person(s) described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this ____ day of _____, 20__.

Mark C. Sleevei

ACKNOWLEDGEMENT

_____ of _____)
County of _____) s.s.:

On this ____ day of _____, 20__, personally appeared before me **Mark C. Sleevei** to me known, and known by me to be the same person(s) described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this 5th day of MARCH, 2015.

Kartoa Chow
Kartoa Chow

ACKNOWLEDGEMENT

State California of California)
County of San Mateo) s.s.:

On this 5th day of MARCH, 2015 personally appeared before me **Kartoa Chow** to me known, and known by me to be the same person(s) described in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Lori Jepsen
Notary Public

