PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------------------|----------------|
| Duane A. Burnett | 11/17/2011 |
| Zhiqiang Zhao | 11/15/2011 |
| David Cole | 11/14/2011 |
| Hubert Josien | 11/15/2011 |
| Dmitri A. Pissarnitski | 11/15/2011 |
| Thavalakulamgar Sasikumar | 11/22/2011 |
| Wen-Lian Wu | 11/15/2011 |
| Martin Domalski | 11/17/2011 |

RECEIVING PARTY DATA

| Name: | Schering Corporation |
|-----------------|--------------------------|
| Street Address: | 2000 Galloping Hill Road |
| City: | Kenilworth |
| State/Country: | NEW JERSEY |
| Postal Code: | 07033 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13990948 |

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

732 594-4000 Phone: Email: us_efs@merck.com Correspondent Name: Merck & Co. Inc. P. O. Box 2000 Address Line 1: Address Line 2: RY86-2011A

Address Line 4: Rahway, NEW JERSEY 07065

PATENT

REEL: 030524 FRAME: 0697

| i | | | | |
|---|-------------------|--|--|--|
| ATTORNEY DOCKET NUMBER: MRL-DOB-00078-US-PCT | | | | |
| NAME OF SUBMITTER: Pamela Spalding | | | | |
| Signature: | /Pamela Spalding/ | | | |
| Date: | 05/31/2013 | | | |
| Total Attachments: 10 source=MRLDOB00078USPCT-ASSIGN-31MAY2013#page1.tif source=MRLDOB00078USPCT-ASSIGN-31MAY2013#page2.tif source=MRLDOB00078USPCT-ASSIGN-31MAY2013#page3.tif source=MRLDOB00078USPCT-ASSIGN-31MAY2013#page4.tif source=MRLDOB00078USPCT-ASSIGN-31MAY2013#page5.tif source=MRLDOB00078USPCT-ASSIGN-31MAY2013#page6.tif source=MRLDOB00078USPCT-ASSIGN-31MAY2013#page7.tif source=MRLDOB00078USPCT-ASSIGN-31MAY2013#page8.tif source=MRLDOB00078USPCT-ASSIGN-31MAY2013#page9.tif source=MRLDOB00078USPCT-ASSIGN-31MAY2013#page9.tif source=MRLDOB00078USPCT-ASSIGN-31MAY2013#page10.tif | | | | |

PATENT REEL: 030524 FRAME: 0698

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,
(1) Duane A. Burnett. located at Bernardsville, NJ 07924

(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:

TRICYCLIC HETEROCYCLES USEFUL AS DIPEPTIDYL PEPTIDASE-IV INHIBITORS

| and/or in the | following app | lication(s): |
|---------------|---------------|--------------|
|---------------|---------------|--------------|

| U.S. Provisional Application No. 61/419,955 filed on 1 | 2/6/2010; | | |
|--|---------------------------|-----------------------------|----|
| U.S. Application No. <u>13/990,948</u> | having a filing date of _ | <u>05/31/2013</u> ; aı | nd |
| PCT International Application No. PCT/US2011/062 | 2868 having a filing | g date of <u>12/01/2011</u> | · |

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, Schering Corporation, a corporation organized under the laws of the State of New Jersey, having an office at 2000 Galloping Hill Road, Kenilworth, New Jersey 07033, 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.

| Executed this 17th day of November | <u>1, 20{</u> |
|---|--|
| Vacan A. Burnatt | |
| Duane A. Burnett | |
| | * |
| ACKNOWLEDGEMENT | |
| State of New Jersey) s.s.: | |
| County of Somerset) | |
| On this day of \ \ \\ \ \ \ \ \ \ \ \ \ | , 20 //. personally appeared before me Duane A. Burnett to on(s) described in and who executed the foregoing instrument, and f his (her) own free will for the purpose set forth. |
| | |
| | |
| | |
| (Seal) | |
| | Notary Public |
| | NOTARY PUBLIC |
| • | STATE OF NEW IERSEY My Commission Expires October 23, 2012 |

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE.

- (1) Zhiqiang Zhao, located at Scotch Plains, NJ 07076(2) Hubert Josien, located at Jersey City, NJ 07302
- (3) Dmitri A. Pissarnitski, located at Scotch Plains, NJ 07076
- (4) Wen-Lian Wu, located at Edison, NJ 08820

(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:

TRICYCLIC HETEROCYCLES USEFUL AS DIPEPTIDYL PEPTIDASE-IV INHIBITORS

and/or in the following application(s):

| U.S. Provisional Appl | ication No. 61/419,955 | filed on 12/06/2010; | | |
|-----------------------|------------------------|---------------------------|------------|-------|
| U.S. Application No. | 13/990,948 | having a filing date of _ | 05/31/2013 | ; and |

PCT International Application No. PCT/US2011/062868 having a filing date of 12/01/2011

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, Schering Corporation, a corporation organized under the laws of the State of New Jersey, having an office at 2000 Galloping Hill Road, Kenilworth, New Jersey 07033, 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.

Notary Public /

| Executed this 15 th day | of <u>November</u> , | 20]] |
|------------------------------------|----------------------------|---|
| Zhiqiang Zhao | | Hubert Josien |
| Down | nth | Wenlianter |
| Dmitri A. Pissarnitski | | Wen-Lian Wu |
| ACKNOWLEDGEMENT | | |
| State of New Jersey |) | |
| County of Union |) s.s.:) | |
| mubert Josien, Dmitri A. | cuted the foregoing instru | , 20 <u>_}/, personally appeared before me Zhiqiang Zhao, Wu to me known, and known by me to be the same person(s) ment, and acknowledged that he (she) executed the same, of his</u> |
| | | |
| | | |
| (Seal) | | Panela S. Sarldina |

PAMELA S. SPALDING NOTARY PUBLIC OF NEW JERSEY My Commission Expires January 6, 2014

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,
(1) David Cole, located at Springfield, NJ 07081

(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:

TRICYCLIC HETEROCYCLES USEFUL AS DIPEPTIDYL PEPTIDASE-IV INHIBITORS

| and/or in the follow | ing application(s): |
|----------------------|---------------------|
|----------------------|---------------------|

| U.S. Provisional Application No. 61/419,955 filed on 12/6/2010; | | | | | |
|--|-----|--|--|--|--|
| U.S. Application No. <u>13/990,948</u> having a filing date of <u>05/31/2013</u> ; a | ınd | | | | |
| PCT International Application No. PCT/US2011/062868 having a filing date of 12/01/2011 | | | | | |

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, Schering Corporation, a corporation organized under the laws of the State of New Jersey, having an office at 2000 Galloping Hill Road, Kenilworth, New Jersey 07033, 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.

| Executed this 44th day of November | <u>) 20 N</u> . |
|---|---|
| David ole | |
| David Cole | |
| ACKNOWLEDGEMENT | |
| State of New Jersey) | • |
| County of Union | |
| On this 14th day of 10m | |
| known, and known by me to be the same acknowledged that he (she) executed the | person(s) described in and who executed the foregoing instrument, and a same, of his (her) own free will for the purpose set forth. |
| | |
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| | |
| | |
| (Seal) | Daves Ataliens |
| | Notary Public |

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,

(1) Thavalakulamgar Sasikumar, located at Edison, NJ 08820

(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:

TRICYCLIC HETEROCYCLES USEFUL AS DIPEPTIDYL PEPTIDASE-IV INHIBITORS

| and/or in the following application | n(s): |
|-------------------------------------|-------|
|-------------------------------------|-------|

| U.S. Provisional Application No. 61/419,955 filed on 12/6/2010; | | | |
|---|---|--|--|
| U.S. Application No. <u>13/990, 948</u> | having a filing date of <u>05/31/2013</u> ; and | | |
| PCT International Application No. PCT/US2011/062 | 2868 having a filing date of <u>12/01/2011</u> | | |

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, Schering Corporation, a corporation organized under the laws of the State of New Jersey, having an office at 2000 Galloping Hill Road, Kenilworth, New Jersey 07033, 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.

Executed this 22 day of November, 20 1/

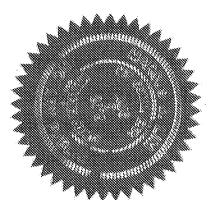
Thayálakulamgar Sasikumar

ACKNOWLEDGEMENT

State of New Jersey

/) s.s.:

County of Middlesex



Notary Public

Notary Public - State of New Jersey
Marcus M. Lim
Middlesex County
My Comm. Expires

REEL: 030524 FRAME: 0706

WORLDWIDE ASSIGNMENT

WHEREAS, I/WE,
(1) Martin Domalski, located at Verona, NJ 07044

(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:

TRICYCLIC HETEROCYCLES USEFUL AS DIPEPTIDYL PEPTIDASE-IV INHIBITORS

| and/or in the following application(s): |
|---|
|---|

| U.S. Provisional Application No. 61/419,955 filed on 1 | 2/6/2010; | | | | |
|--|-------------------|--------------|------------------|----------|-----|
| U.S. Application No. <u>13/990,948</u> | having a filing d | late of | 05/31/20 |)13; | and |
| PCT International Application No. PCT/US2011/062 | 2868 having | g a filing d | ate of <u>12</u> | 2/01/201 | 1 |

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, Schering Corporation, a corporation organized under the laws of the State of New Jersey, having an office at 2000 Galloping Hill Road, Kenilworth, New Jersey 07033, 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.

| Executed this | day of <u>Ne Vem des</u> | , 20 <u><i>]] [</i></u> . |
|--|---|---|
| Martin Domalski | Donall" | |
| | | |
| ACKNOWLEDGEMENT | | |
| State of New Jersey |)) s.s.: | |
| County of Essex |) 5.5 | |
| On this // me known, and known b acknowledged that he (s | day of <u>* </u> | , 20 1), personally appeared before me Martin Domalski to n(s) described in and who executed the foregoing instrument, and nis (her) own free will for the purpose set forth. |
| | | |
| (Seal) | | Notary Public |
| | | Notary Public |
| | | Attlat Z. Helmy Notary Public, State of New Jersey My Commission Expires 12/12/2011 |

Page 2 of 2

Computer Generated Template "Assignment-Schering Corporation. Single Assignes Worldwide" (Assignment) Merck Sharp & Dohme Corp. 11/04/2010

RECORDED: 05/31/2013