504051024 10/14/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4097687

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------|----------------|
| CHARLES W. BISHOP | 03/18/2009 |
| KEITH H. CRAWFORD | 10/19/2012 |
| ERIC J. MESSNER | 10/15/2012 |

RECEIVING PARTY DATA

| Name: | PROVENTIV THERAPEUTICS, LLC | |
|-------------------|-----------------------------|--|
| Street Address: | 2333 WAUKEGAN ROAD | |
| Internal Address: | SUITE E100 | |
| City: | BANNOCKBURN | |
| State/Country: | ILLINOIS | |
| Postal Code: | 60015 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15231357 |

CORRESPONDENCE DATA

Fax Number: (312)474-0448

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.

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Email: docket@marshallip.com

Correspondent Name: MARSHALL, GERSTEIN & BORUN LLP

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Address Line 4: CHICAGO, ILLINOIS 60606

| ATTORNEY DOCKET NUMBER: | 31138/43029G | |
|-------------------------|-----------------------------|--|
| NAME OF SUBMITTER: | MICHAEL MUCZYNSKI | |
| SIGNATURE: | /MICHAEL MUCZYNSKI #48,642/ | |
| DATE SIGNED: | 10/14/2016 | |

Total Attachments: 5

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PATENT 504051024 REEL: 040019 FRAME: 0197

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> PATENT REEL: 040019 FRAME: 0198

ASSIGNMENT

Serial No:

12/109,983

Filed:

April 25, 2008

Title:

Methods and Compositions for Controlled Release Oral Dosage of a Vitamin D Compound

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby assigns to PROVENTIV THERAPEUTICS, LLC, 2333 Waukegan Road, Suite E100, Bannockburn, IL, 60015 (hereinafter "Assignee"), its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in the above-identified application for letters patent and in said application and any and all other applications, both in the United States and in other countries, which the undersigned may file or be named as an inventor, either solely or jointly with others, on said invention or improvements, and in any and all letters patent of the United States and other countries, which may be obtained on any of said applications, and in any reissue or extension thereof.

The undersigned hereby authorizes and requests the Commissioner for Patents to issue said letters patent to said Assignee.

The undersigned warrants himself to be the owner of the interest herein assigned and to have the right to make this assignment and further warrant that there are no outstanding prior assignments, licenses, or other rights in the interest herein assigned except in favor of Assignee.

Assignee, its successors and assigns, to execute any and all applications on said invention or improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension of any letters patent that may be granted upon any and all of said applications, and any and all applications and other documents for letters patent in other countries on said invention or improvements, that said Assignee, its successors or assigns, may deem necessary or expedient, and for said consideration the undersigned further agrees upon the request of said Assignee, its successors or assigns, in the event of any application or letters patent assigned herein becoming involved in Interference or Opposition, to cooperate to the best of the ability of the undersigned with said Assignee, its successors or assigns, in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof, the undersigned hereby agreeing to perform, upon request, any and all affirmative acts to obtain said letters patent, both in the United States and in other countries, and vest all rights therein hereby conveyed in said Assignee, its successors and assigns, whereby said letters patent will be held and enjoyed by said Assignee, its successors and assigns, to the full end of the term for which said letters patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment and sale had not been made.

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WITNESS our hands this

18 La day of March, 2009

Witnesses:

Name: Charles W. Bishop

Name: Sherin Kookin

Name: Sherin Kawarsky

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ASSIGNMENT

Serial Nos: US 12/109,983 and PCT/US08/61579

Filed: April 25, 2008

Title: METHODS AND COMPOSITIONS FOR CONTROLLED RELEASE ORAL DOSAGE OF A

VITAMIN D COMPOUND

For \$10.00 (Ten Dollars) and good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby assign to PROVENTIV THERAPEUTICS, LLC, 2333 Waukegan Road, Suite E100, Bannockburn, Illinois 60015 (hereinafter "Assignee"), its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in the above-identified patent applications and any and all other applications, both in the United States and in other countries, which the undersigned may file or be named as an inventor, either solely or jointly with others, on said invention or improvements, and in any and all letters patent of the United States and other countries, which may be obtained on any of said applications, and in any reissue or extension thereof.

The undersigned hereby authorize and request the Commissioner for Patents to issue said letters patent to said Assignee.

The undersigned warrant themselves to be the owners of the interest herein assigned and to have the right to make this assignment and further warrant that there are no outstanding prior assignments, licenses, or other rights in the interest herein assigned except in favor of Assignee.

Assignee, its successors and assigns, to execute any and all applications on said invention or improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension of any letters patent that may be granted upon any and all of said applications, and any and all applications and other documents for letters patent in other countries on said invention or improvements, that said Assignee, its successors or assigns, may deem necessary or expedient, and for said consideration the undersigned further agree upon the request of said Assignee, its successors or assigns, in the event of any application or letters patent assigned herein becoming involved in Interference or Opposition, to cooperate to the best of the ability of the undersigned with said Assignee, its successors or assigns, in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof, the undersigned hereby agreeing to perform, upon request, any and all affirmative acts to obtain said letters patent, both in the United States and in other countries, and vest all rights therein hereby conveyed in said Assignee, its successors and assigns, whereby said letters patent will be held and enjoyed by said Assignee, its successors and assigns, to the full end of the term for which said letters patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment and sale had not been made.

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| WITNESS my hand this State of CO County of DOUGLAS | 19 th day of Octopick, 2012. Reith M. Crawford |
|--|---|
| to be the same person whose name is subscribed | oresaid, appeared Keith H. Crawford, to me personally known to the foregoing instrument, and acknowledged that he y act and for the uses and purposes therein expressed, day and year last above given. |
| My Commission Expires: | 01.2015 (Notary Public |
| | JOSHUA JAMES HIATT NOTARY PUBLIC |

STATE OF COLORADO MY COMMISSION EXPIRES 03/01/2016

| WITNESS my hand this | 15 day of October, 2012. |
|--|---|
| State of TLYNUK County of LARE | Eric J. Messner |
| Notary Public in and for the County and Stat be the same person whose name is subscribed | of <u>October</u> , <u>2015</u> , before me, a e aforesaid, appeared Eric J. Messner, to me personally known to d to the foregoing instrument, and acknowledged that he executed and for the uses and purposes therein expressed. me day and year last above given. |
| My Commission Expires: | muer 14,2015 Judith L Dundahl Notary Public |
| | OFFICIAL SEAL JUDITH L. SANDAHL Notary Public - State of Illinois My Commission Expires Dec 14, 2015 |

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