505139468 10/12/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5186232

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------|----------------|
| CATHERINE TACHDJIAN | 02/24/2011 |
| DONALD S. KARANEWSKY | 02/24/2011 |
| XIAO-QING TANG | 02/24/2011 |
| QING CHEN | 02/24/2011 |
| PETER LEEMING | 02/25/2011 |
| TAYYAB RASHID | 02/28/2011 |
| DANIEL LEVIN | 02/28/2011 |

RECEIVING PARTY DATA

| Name: | SENOMYX, INC. |
|-----------------|-------------------------|
| Street Address: | 4767 NEXUS CENTRE DRIVE |
| City: | SAN DIEGO |
| State/Country: | CALIFORNIA |
| Postal Code: | 92121 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16119380 |

CORRESPONDENCE DATA

Fax Number: (949)760-9502

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.

Phone: 9497600404

Email: efiling@knobbe.com

Correspondent Name: KNOBBE MARTENS OLSON & BEAR LLP

Address Line 1: 2040 MAIN STREET

Address Line 4: IRVINE, CALIFORNIA 92614

| ATTORNEY DOCKET NUMBER: | SNMX.012D4 |
|-------------------------|-----------------|
| NAME OF SUBMITTER: | RYAN E. MELNICK |
| SIGNATURE: | /Ryan Melnick/ |
| DATE SIGNED: | 10/12/2018 |

PATENT 505139468 REEL: 047149 FRAME: 0856

Total Attachments: 9 source=2018-07-12 Assignment (from parent)-SNMX.012D4#page1.tif source=2018-07-12 Assignment (from parent)-SNMX.012D4#page2.tif source=2018-07-12 Assignment (from parent)-SNMX.012D4#page3.tif source=2018-07-12 Assignment (from parent)-SNMX.012D4#page4.tif source=2018-07-12 Assignment (from parent)-SNMX.012D4#page5.tif source=2018-07-12 Assignment (from parent)-SNMX.012D4#page6.tif source=2018-07-12 Assignment (from parent)-SNMX.012D4#page7.tif source=2018-07-12 Assignment (from parent)-SNMX.012D4#page8.tif source=2018-07-12 Assignment (from parent)-SNMX.012D4#page9.tif

PATENT REEL: 047149 FRAME: 0857

ASSIGNMENT

Catherine TACHDJIAN, Donald S. KARANEWSKY, Xiao-Qing TANG, Qing CHEN, Peter LEEMING, Tayyab RASHID, and Daniel LEVIN (each referred to as "Assignor") have made an invention(s) (the "Invention(s)") set forth in an application for patent of the United States, entitled <u>PROCESSES AND INTERMEDIATES FOR MAKING SWEET TASTE ENHANCERS</u>, and which is a:

| (1) | provisional application |
|-----|---|
| | (a) |
| | (b) bearing Application No, and filed on ; or |
| (2) | non-provisional application |
| | (a) to be filed herewith; or |
| | (b) Earing Application No. 13/056,843, and filed on |
| | <u>January 31, 2011.</u> |

WHEREAS, SENOMYX, INC. a corporation duly organized under and pursuant to the laws of California, and having its principal place of business at 4767 Nexus Centre Drive, San Diego, CA 92121 (the "Assignee"), is desirous of acquiring the entire right, title, and interest in: the Invention; the application for patent identified in paragraph (1) or (2); the right to file applications for patent of the United States or other countries on the Invention; any application for patent of the United States or other countries claiming priority to these application; any provisional or other right to recover damages, including royalties, for prior infringements of these applications; and any patent of the United States or other countries that may be granted therefor or thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, and to the extent that the Assignor has not done so already via a prior agreement with the Assignee, or if the Assignor has already done so via a prior agreement with the Assignee then in confirmation of any obligation to do so in said prior agreement, the Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the Assignor's entire right, title, and interest in:

- (a) the Invention(s);
- (b) the application for patent identified in paragraph (1) or (2);
- (c) the right to file applications for patent of the United States or other countries on the Invention(s), including all rights under the Paris Convention for the Protection of Industrial Property and under the Patent Cooperation Treaty;
- (d) any application(s) for patent of the United States or other countries claiming the Invention(s);

- (e) any application(s) for patent of the United States or other countries claiming priority to the application for patent identified in paragraph (1) or (2) or any application(s) for patent claiming the Invention(s), including any division(s), continuation(s), and continuation(s)-in-part; and
- (f) any provisional or other right to recover damages, including royalties, for prior infringements of any application for patent identified in the preceding paragraphs (b)-(e); and
- (g) any patent(s) of the United States or other countries that may be granted for or on any application for patent identified in the preceding paragraphs (b) (e), including any reissue(s) and extension(s) of said patent(s).

The above-granted rights, titles, and interests are to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

The Assignor hereby represents to the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, or if applicable, at such time said prior agreement was executed, the Assignor is a lawful owner of an undivided interest in the entire right, title, and interest in and to the Invention(s), that the Invention(s) are unencumbered, except, if applicable, by obligation to assign in accordance with said prior agreement, and that the Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth herein.

The Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives, and assigns, that the Assignor will sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done in connection with any and all proceedings for the procurement, maintenance, enforcement and defense of the Invention(s), said applications, and said patents, including interference proceedings, without charge to the Assignor, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns.

The Assignor hereby authorizes and requests the attorneys of COOLEY LLP to insert in the spaces provided above the filing date, the application number, and the attorney docket number of the application identified in paragraph (1) or (2) when known.

The Assignor hereby requests the Commissioner of Patents to issue said patents of the United States to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

128886 v1/DC

Date: 2-24-2011 By: Catherine TACHDJIAN

State of California

SS.

County of San Diego)

On <u>feb. 24</u>, 2011, before me, Sherry Dollins, Notary Public, personally appeared, Catherine Tachdjian who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal.

SHERRY DOLLINS
Commission # 1875447
Notary Public - California
San Diego County
My Comm. Expires Jan 29, 2014

Signature of Notary Public

Place Notary Seal Above

Attorney Docket No. SENO-013/02US 014810-2296 Application No.: 13/056,843; Nat'l Phase of PCT/US2009/052048 Page 4 of 9

Date: 02-24-201/
By: Loud S. Karanewsky

Donald S. KARANEWSKY

State of California

SS.

County of San Diego ()

On <u>Feb. 24</u>, 2011, before me, Sherry Dollins, Notary Public, personally appeared, Donald S. Karanewsky who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal.

SHERRY DOLLINS Commission # 1875447 Notary Public - California San Diego County My Comm. Expires Jan 29, 2014

Signature of Notary Public

Place Notary Seal Above

Attorney Docket No. SENO-013/02US 014810-2296 Application No.: 13/056,843; Nat'l Phase of PCT/US2009/052048 Page 5 of 9

| Date: 2/24/201/ By: | Xiao-Qing TANG |
|---|---|
| State of California) Sss. County of San Diego) On Falo 24 2011 before me She | |
| | erry Dollins, Notary Public, personally |
| appeared, Xiao-Qing Tang who proved to me or the person whose name is subscribed to the with | |
| that he executed the same in his authorized cap | |
| instrument the person, or the entity upon behalf instrument. | |
| I certify under penalty of perjury under the la | over of the State of Colifornia that the |
| foregoing is true and correct. | two of the state of Camornia that the |
| | |
| WITNESS my hand and official seal. Sherry Dolling | SHERRY DOLLINS Commission # 1875447 Notary Public - California San Diego County My Comm. Expires Jan 29, 2014 |
| Signature of Notary Public | Place Notary Seal Above |

Attorney Docket No. SENO-013/02US 014810-2296 Application No.: 13/056,843; Nat'l Phase of PCT/US2009/052048 Page 6 of 9

| Date: $02 - 24/11$ | Ву: | Qing CHEN |
|--------------------|-----|-----------|
| | , | • |

State of California

SS.

County of San Diego)

, 2011, before me, Sherry Dollins, Notary Public, personally appeared, Qing Chen who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal.

SHERRY DOLLINS Commission # 1875447 Notary Public - California San Diego County Comm. Expires Jan 29, 201

Signature of Notary Public

Place Notary Seal Above

Attorney Docket No. SENO-013/02US 014810-2296 Application No.: 13/056,843; Nat'l Phase of PCT/US2009/052048 Page 7 of 9

| Date: 2-25-1/ By: P. Leeming |
|--|
| Peter LEEMING |
| |
| State of California) |
| State of <u>California</u> County of <u>los Angeles</u> ss. |
| On February 25, 2011, before me, Laura Valencia, |
| Notary Public, personally appeared PETER LEEMING, personally known to me or |
| proved to me on the basis of satisfactory evidence, to be the person(s) whose name(s) |
| is/are subscribed to the within instrument and acknowledged to me that he/she/they |
| executed the same in his/her/their authorized capacity(ies), and that by his/her/their |
| signature(s) on the instrument the person(s), or the entity upon behalf of which the |
| person(s) acted, executed the instrument. |
| WITNESS my hand and official seal. WITNESS my hand and official seal. Los Angeles County My Comm. Expires Dec 11, 2013 |
| Signature of Notary Public Place Notary Seal Above |
| My Commission Expires: Dec. 11 2013 |

Attorney Docket No. SENO-013/02US 014810-2296 Application No.: 13/056,843; Nat'l Phase of PCT/US2009/052048 Page 8 of 9

| Date:02/28/11 | By: Masuri Tayyab RASHID |
|--|--|
| Notary Public, personally appeared TA proved to me on the basis of satisfactor is/are subscribed to the within instrum executed the same in his/her/their auth | refore me, <u>AURA Valencea</u> , AYYAB RASHID, personally known to me or ry evidence, to be the person(s) whose name(s) then and acknowledged to me that he/she/they norized capacity(ies), and that by his/her/their |
| person(s) acted, executed the instrument. | on(s), or the entity upon behalf of which the |
| I certify under penalty of perjury under foregoing is true and correct. | er the laws of the State of California that the |
| WITNESS my hand and official seal. | LAURA VALENCIA Commission # 1871275 Notary Public - California Los Angeles County My Comm. Expires Dec 11, 2013 |
| Signature of Notary Public | Place Notary Seal Above |
| My Commission Expires: Dec // | 2013 |

Attorney Docket No. SENO-013/02US 014810-2296 Application No.: 13/056,843; Nat'l Phase of PCT/US2009/052048 Page 9 of 9

| Date: 2/28/11 B | v: Jamed Leni. |
|--|---|
| | Daniel LEVIN |
| State of <u>Alitornia</u>) County of <u>105 Angeles</u>) On <u>February 28</u> , 2011, before Notary Public, personally appeared DANIEL LET on the basis of satisfactory evidence, to be the perwithin instrument and acknowledged to me that authorized capacity(ies), and that by his/her/their satisfactory evidence. | ore me, AUVA VALENCIA, VIN, personally known to me or proved to me rson(s) whose name(s) is/are subscribed to the he/she/they executed the same in his/her/their |
| the entity upon behalf of which the person(s) acted | |
| WITNESS my hand and official seal. | LAURA VALENCIA Commission # 1871275 Notary Public - California Los Angeles County My Comm. Expires Dec 11, 2013 |
| Signature of Notary Public | Place Notary Seal Above |
| My Commission Expires: Dec. // 2013 | |

128886 v1/DC

PATENT REEL: 047149 FRAME: 0866