PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4667367

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

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| DAVID BLUM | 09/19/2017 |
| SHERRY LIN | 09/26/2017 |
| HEMANT BOKIL | 10/03/2017 |
| MICHAEL A. MOFFITT | 10/16/2017 |

RECEIVING PARTY DATA

| Name: | BOSTON SCIENTIFIC NEUROMODULATION CORPORATION |
|-----------------|---|
| Street Address: | 25155 RYE CANYON LOOP |
| City: | VALENCIA |
| State/Country: | CALIFORNIA |
| Postal Code: | 91355 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15783961 |

CORRESPONDENCE DATA

Fax Number:

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.

Email: patentdocketing@lowegrahamjones.com

Correspondent Name: BRUCE E. BLACK/LOWE GRAHAM JONES PLLC

Address Line 1: 701 FIFTH AVENUE

Address Line 2: SUITE 4800

Address Line 4: SEATTLE, WASHINGTON 98104

| ATTORNEY DOCKET NUMBER: | BSNC-1-628.2 |
|-------------------------|--|
| NAME OF SUBMITTER: | TIFFANY D. KELLY |
| SIGNATURE: | /Tiffany D. Kelly/ |
| DATE SIGNED: | 10/31/2017 |
| | This document serves as an Oath/Declaration (37 CFR 1.63). |

Total Attachments: 8

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Page 1 of 2

Client Ref. No.: 16-0030US01

Time: SYSTEMS AND METHODS FOR CLOSED-LOOP DETERMINATION OF STIMULATION PARAMETER SETTINGS FOR AN ELECTRICAL SIMULATION SYSTEM

ASSIGNMENT

| WHEREAS, David Blum, Sh | ierry Lin, Hemant Bokil and Michael A. | . Moffitt have |
|--|--|----------------|
| invented certain new and useful impro | ovements as described in the specification | bearing the |
| above Attorney Docket No. and title, | executed by me concurrently herewith, an | d/or being |
| identified in the United States Patent a | and Trademark Office ("USPTO") by App | lication No. |
| ् filed | ("Invention"). | |
| | · · · · · · · · · · · · · · · · · · · | |

WHEREAS, BOSTON SCIENTIFIC NEUROMODULATION CORPORATION, a Corporation of the State of Delaware, and having an address of 25155 Rye Canyon Loop, Valencia, California 91355 (together with its successors and assigns, the "Assignee"), seeks to memorialize its ownership of the entire right, title and interest in and to the Invention;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I transfer to Assignee my entire right, title, and interest in and to the Invention, including all inventions disclosed or claimed in the above-identified patent application, including any improvements thereof, any corresponding domestic applications (e.g., provisional, non-provisional, divisional, continuation, continuation-in-part, reexamination, and/or reissue patent), any corresponding foreign applications, all patents issuing thereon, or other patent application based off or claiming priority to the above-identified patent application, and all rights and benefits under any applicable treaty or convention. I authorize the USPTO (or foreign equivalent thereof) to issue any patent (or similar legal protection) to the Assignee.

I authorize the Assignee to insert in this instrument the filing date and application number of the application when ascertained. I hereby authorize the Assignee (or its designee) to apply for patent (or similar legal protection) in its own name if desired, in any and all countries.

I represent to the Assignee that I have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I agree when requested, without additional consideration, but at the expense of the Assignee, to provide additional reasonable assistance necessary to memorialize this assignment, to execute all oaths, declarations, assignments, powers of attorney and other papers necessary to perfect and vest title to the rights assigned herein to the Assignee; and will render all assistance in filing, obtaining, maintaining, and enforcing any patent (or similar legal protection) on the Invention in any and all countries.

Atterney Docket No.: BSNC-1-628.2

Page 2 of 2

Client Ref. No.: 16-0030US01

Trie; Systems and Metriods for Closed-Loop Determination of Stimulation Parameter Settings for an electrical Simulation System

DECLARATION

I have reviewed and understand the contents of the above-identified patent application including the claims, and I believe I am an original or an original joint inventor of a claimed invention in the above-identified patent application. The above-identified patent application was made or authorized to be made by me. I am aware of and acknowledge my duty to disclose to the USPTO all information known to me to be material to patentability of the claims in the above-identified patent application. I acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

| Dated: 19 SEP 2017 | David Blum, Inventor |
|--------------------|-------------------------------|
| Dated: | Sherry Liu, Inventor |
| Dated: | Hemaut Bokii, Inventor |
| Dated: | Milihaal A Biloffist Inventor |

Attorney Docket No.: BSNC-1-628.2

Page 1 of 2

Client Ref. No.: 16-0030US01

Title: SYSTEMS AND METHODS FOR CLOSED-LOOP DETERMINATION OF STIMULATION PARAMETER SETTINGS FOR AN ELECTRICAL SIMULATION SYSTEM

ASSIGNMENT

| WHEREAS, David Blum, Sherry Lin, Hemant Bokil and Michael A. Moffitt have |
|--|
| invented certain new and useful improvements as described in the specification bearing the |
| above Attorney Docket No. and title, executed by me concurrently herewith, and/or being |
| identified in the United States Patent and Trademark Office ("USPTO") by Application No. |
| filed("Invention"). |

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Attorney Docket No.: BSNC-1-628.2

Page 2 of 2

Client Ref. No.: 16-0030US01

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| Dated: | |
|----------------------------|----------------------------|
| | David Blum, Inventor |
| Dated: <u>26 Sept 2017</u> | |
| | Sherry Lin, Inventor |
| Dated: | |
| | Hemant Bokil, Inventor |
| Dated: | |
| | Michael A Moffitt Inventor |

Attorney Docket No.: BSNC-1-628,2

Page 1 of 2

Client Ref. No.: 16-0030US01

Title: SYSTEMS AND METHODS FOR CLOSED-LOOP DETERMINATION OF STIMULATION PARAMETER SETTINGS FOR AN ELECTRICAL SIMULATION SYSTEM

ASSIGNMENT

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Attorney Docket No.; BSNC-1-628.2

Page 2 of 2

Client Ref. No.: 16-0030US01

Tille: SYSTEMS AND METHODS FOR CLOSED-LOOP DETERMINATION OF STIMULATION PARAMETER SETTINGS FOR AN BLECTRICAL SIMULATION SYSTEM

DECLARATION

I have reviewed and understand the contents of the above-identified patent application including the claims, and I believe I am an original or an original joint inventor of a claimed invention in the above-identified patent application. The above-identified patent application was made or authorized to be made by me. I am aware of and acknowledge my duty to disclose to the USPTO all information known to me to be material to patentability of the claims in the above-identified patent application. I acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

| Dated: | |
|------------------|--|
| | David Blum, Inventor |
| Dated: | |
| | Sherry Lin, Inventor |
| Dated: 043, 2017 | 1. 业支 |
| Dailou, | Hemint Bokil, Inventor |
| n | 8 · · · · · · |
| Dated: | Michael A. Moffitt, Inventor |
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Attorney Docket No.: BSNC-1-628.2

Page 1 of 2

Client Ref. No.: 16-0030US01

Title: SYSTEMS AND METHODS FOR CLOSED-LOOP DETERMINATION OF STIMULATION PARAMETER SETTINGS FOR AN ELECTRICAL SIMULATION SYSTEM

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Client Ref. No.: 16-0030US01

Title: SYSTEMS AND METHODS FOR CLOSED-LOOP DETERMINATION OF STIMULATION PARAMETER SETTINGS FOR AN ELECTRICAL SIMULATION SYSTEM

DECLARATION

RECORDED: 10/31/2017

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| Dated: | | |
|--------------------|-----------------------------|--|
| | David Blum, Inventor | |
| Dated: | Sherry Lin, Inventor | |
| Dated: | Hemant Bokil, Inventor | |
| Dated: 16 OCT 2017 | Michael A. Moffiel Inventor | |