

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT6515117

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT														
<b>NATURE OF CONVEYANCE:</b>	NUNC PRO TUNC ASSIGNMENT														
<b>EFFECTIVE DATE:</b>	10/05/2018														
<b>CONVEYING PARTY DATA</b>															
	<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>OLIVER BUCHERT</td> <td>11/20/2019</td> </tr> <tr> <td>AMIR ALI SHARIFI-MEHR</td> <td>11/20/2019</td> </tr> <tr> <td>BRYAN WEINER</td> <td>11/20/2019</td> </tr> <tr> <td>MICHAEL CHANG</td> <td>08/04/2020</td> </tr> <tr> <td>STEVEN F. KRAUSE</td> <td>11/26/2019</td> </tr> <tr> <td>M. TODD MILLER</td> <td>11/27/2019</td> </tr> </tbody> </table>	Name	Execution Date	OLIVER BUCHERT	11/20/2019	AMIR ALI SHARIFI-MEHR	11/20/2019	BRYAN WEINER	11/20/2019	MICHAEL CHANG	08/04/2020	STEVEN F. KRAUSE	11/26/2019	M. TODD MILLER	11/27/2019
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STEVEN F. KRAUSE	11/26/2019														
M. TODD MILLER	11/27/2019														
<b>RECEIVING PARTY DATA</b>															
<b>Name:</b>	STRYKER EUROPEAN HOLDINGS III, LLC														
<b>Street Address:</b>	THE CORPORATION TRUST COMPANY, 1209 ORANGE STREET														
<b>City:</b>	WILMINGTON														
<b>State/Country:</b>	DELAWARE														
<b>Postal Code:</b>	19801														
<b>PROPERTY NUMBERS Total: 1</b>															
	<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>17036733</td> </tr> </tbody> </table>	Property Type	Number	Application Number:	17036733										
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Application Number:	17036733														
<b>CORRESPONDENCE DATA</b>															
<b>Fax Number:</b>	(908)654-0415														
<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>															
<b>Phone:</b>	9086545000														
<b>Email:</b>	ASSIGNMENT@LERNERDAVID.COM, INFORMATIONSSPECIALISTS@LERNERDAVID.COM														
<b>Correspondent Name:</b>	LERNER DAVID IP LAW														
<b>Address Line 1:</b>	20 COMMERCE DRIVE														
<b>Address Line 4:</b>	CRANFORD, NEW JERSEY 07016														
<b>ATTORNEY DOCKET NUMBER:</b>	SPINE.11785														
<b>NAME OF SUBMITTER:</b>	CSABA ATTILA SZAKOLCZAI														
<b>SIGNATURE:</b>	/Csaba Attila Szakolczai/														
<b>DATE SIGNED:</b>	01/26/2021														

**Total Attachments: 6**

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**CONFIRMATORY ASSIGNMENT FOR UTILITY APPLICATION**

Docket Number (Optional)  
SPINE 3.0F-643

Whereas, I, Oliver Buchert of 43 Roth Avenue, Franklin Lakes, New Jersey 07417

hereafter referred to as Assignor, have invented certain new and useful improvements in Pedicle Subtraction Osteotomy Guide

for which a utility application for a United States Patent was filed on October 5, 2018  
Application Number 16/152,621

for which a utility application for a United States Patent was executed on \_\_\_\_\_

Whereas, I had an obligation to assign my rights in said invention and application to

**STRYKER EUROPEAN HOLDINGS III, LLC**

a limited liability company incorporated under the laws of the State of Delaware having its registered agent's address at

The Corporation Trust Company, 1209 Orange Street, Wilmington, 19801 Delaware, United States of America

who was desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I as assignor, as of October 5, 2018, *nunc pro tunc*, hereby sells, assigns, transfers and sets over to Assignee, and Assignee hereby accepts, the entire right, title and interest, for the United States of America and all other countries, in and to the invention and the Application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries for the invention, including without limitation all applications and patents for the invention claiming priority or benefit of the Application pursuant to any law or treaty, and all rights under any International Conventions for the Protection of Intellectual Property, including the Paris Convention and the European Patent Convention and the corresponding rights to claim benefit from the priority of such applications and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit, and the Commissioner of Patents and Trademarks and the Patent Office officials in foreign countries as are duly authorized by the respective foreign patent laws to issue patents are hereby authorized and requested to issue all patents on said improvements or resulting therefrom to Assignee, as assignee of the entire interest therein; and the Assignor does hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, continuation-in-part, reissue and other applications for Letters Patent on the invention and all assignments thereof to Assignee or its assigns, to communicate to Assignee or its representatives all facts known to the undersigned respecting the invention, whenever requested, to testify in any interferences or other legal proceedings in which the Application and any related applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid Assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by Assignee.

I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 62/569,035, filed October 8, 2017 ("Provisional"), and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of the Provisional pursuant to any law or treaty in the countries of the world.

Assignor does hereby authorize the attorneys of Assignee and their assigns to insert on this Assignment the filing date and application number of said Application when known. We hereby also declare that we agree that the Assignee may take steps for recordal of this Assignment in the sole name of the Assignee.

11/20/2019  
(Date)

[Signature]  
(Signature)

State of NJ ) SS:  
County of GREEN )

On this 22<sup>nd</sup> day of NOVEMBER, 2019 before me personally came the above-named OLIVER BUCHERT, to me personally known as the individual who executed the foregoing instrument, who acknowledged to me that the same was executed by him/her of his/her own free will for the purposes therein set forth.

DAVID LEE  
NOTARY PUBLIC OF NEW JERSEY  
Comm. # 4008647  
My Commission Expires 01/12/2023

**CONFIRMATORY ASSIGNMENT FOR UTILITY APPLICATION**

Docket Number (Optional)  
SPINE 3.0F-643

Whereas, I, Amir Ali Sharifi-Mehr of 12 Elm Street, Bloomingdale, New Jersey 07403

hereafter referred to as Assignor, have invented certain new and useful improvements in Pedicle Subtraction Osteotomy Guide

for which a utility application for a United States Patent was filed on October 5, 2018  
Application Number 16/152,621

for which a utility application for a United States Patent was executed on \_\_\_\_\_

Whereas, I had an obligation to assign my rights in said invention and application to

**STRYKER EUROPEAN HOLDINGS III, LLC**

a limited liability company incorporated under the laws of the State of Delaware having its registered agent's address at

The Corporation Trust Company, 1209 Orange Street, Wilmington, 19801 Delaware, United States of America

who was desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I as assignor, as of October 5, 2018, *nunc pro tunc*, hereby sells, assigns, transfers and sets over to Assignee, and Assignee hereby accepts, the entire right, title and interest, for the United States of America and all other countries, in and to the invention and the Application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries for the invention, including without limitation all applications and patents for the invention claiming priority or benefit of the Application pursuant to any law or treaty, and all rights under any International Conventions for the Protection of Intellectual Property, including the Paris Convention and the European Patent Convention and the corresponding rights to claim benefit from the priority of such applications and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit, and the Commissioner of Patents and Trademarks and the Patent Office officials in foreign countries as are duly authorized by the respective foreign patent laws to issue patents are hereby authorized and requested to issue all patents on said improvements or resulting therefrom to Assignee, as assignee of the entire interest therein; and the Assignor does hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, continuation-in-part, reissue and other applications for Letters Patent on the invention and all assignments thereof to Assignee or its assigns, to communicate to Assignee or its representatives all facts known to the undersigned respecting the invention, whenever requested, to testify in any interferences or other legal proceedings in which the Application and any related applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid Assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by Assignee.

I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 62/569,035, filed October 6, 2017 ("Provisional"), and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of the Provisional pursuant to any law or treaty in the countries of the world.

Assignor does hereby authorize the attorneys of Assignee and their assigns to insert on this Assignment the filing date and application number of said Application when known. We hereby also declare that we agree that the Assignee may take steps for recordal of this Assignment in the sole name of the Assignee.

Nov 20, 2019

(Date)

[Signature]

(Signature)

State of NJ ) SS:  
County of BERGEN )

On this 20 day of Nov, 2019 before me personally came the above-named AMIR ALL SHARIFI-MEHR, to me personally known as the individual who executed the foregoing instrument, who acknowledged to me that the same was executed by him/her of his/her own free will for the purposes therein set forth.

**DAVID LEE**  
NOTARY PUBLIC OF NEW JERSEY  
Com. # 175088647  
My Commission Expires 07/23/23

**CONFIRMATORY ASSIGNMENT FOR UTILITY APPLICATION**

Docket Number (Optional)  
SPINE 3.0F-643

Whereas, I, Bryan Weiner of 10 Blanchard Court, Randolph, New Jersey 07869

hereafter referred to as Assignor, have invented certain new and useful improvements in Pedicle Subtraction Osteotomy Guide

for which a utility application for a United States Patent was filed on October 5, 2018  
Application Number 16/152,621

for which a utility application for a United States Patent was executed on \_\_\_\_\_

Whereas, I had an obligation to assign my rights in said invention and application to

STRYKER EUROPEAN HOLDINGS III, LLC

a limited liability company incorporated under the laws of the State of Delaware having its registered agent's address at

The Corporation Trust Company, 1209 Orange Street, Wilmington, 19801 Delaware, United States of America

who was desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I as assignor, as of October 5, 2018, *nunc pro tunc*, hereby sells, assigns, transfers and sets over to Assignee, and Assignee hereby accepts, the entire right, title and interest, for the United States of America and all other countries, in and to the invention and the Application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries for the invention, including without limitation all applications and patents for the invention claiming priority or benefit of the Application pursuant to any law or treaty, and all rights under any International Conventions for the Protection of Intellectual Property, including the Paris Convention and the European Patent Convention and the corresponding rights to claim benefit from the priority of such applications and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit, and the Commissioner of Patents and Trademarks and the Patent Office officials in foreign countries as are duly authorized by the respective foreign patent laws to issue patents are hereby authorized and requested to issue all patents on said improvements or resulting therefrom to Assignee, as assignee of the entire interest therein; and the Assignor does hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, continuation-in-part, reissue and other applications for Letters Patent on the invention and all assignments thereof to Assignee or its assigns, to communicate to Assignee or its representatives all facts known to the undersigned respecting the invention, whenever requested, to testify in any interferences or other legal proceedings in which the Application and any related applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid Assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by Assignee.

I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 62/569,035, filed October 6, 2017 ("Provisional"), and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of the Provisional pursuant to any law or treaty in the countries of the world.

Assignor does hereby authorize the attorneys of Assignee and their assigns to insert on this Assignment the filing date and application number of said Application when known. We hereby also declare that we agree that the Assignee may take steps for recordal of this Assignment in the sole name of the Assignee.

11/20/19  
(Date)

Bryan Weiner  
(Signature)

State of NJ ) SS:  
County of BERGEN )

On this 20 day of NOV, 2019, before me personally came the above-named BRYAN WEINER, to me personally known as the individual who executed the foregoing instrument, who acknowledged to me that the same was executed by him/her of his/her own free will for the purposes therein set forth.

DAVID Lee  
NOTARY PUBLIC OF NEW JERSEY (Notary Public)  
Comm. # 50083847  
My Commission Expires 01/01/22

**COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION (37 CFR 1.63) USING AN APPLICATION DATA SHEET**

Attorney, Docket No. SPINE 3.0F-643

Title of the Invention ("Invention") Pedicle Subtraction Osteotomy Guide

Legal Name of Inventor/Assignor ("Inventor/Assignor") Michael Chang

Assignee ("Assignee") Stryker European Holdings III, LLC, limited liability company incorporated under the laws of the State of Delaware, having its principal place of business at The Corporation Trust Company, 1209 Orange Street, Wilmington, 19801 Delaware, United States of America.

**DECLARATION**

As named inventor, I hereby declare that:

- (i) this declaration is directed to:
  - The attached Application
  - OR
  - United States Application Number or PCT International Application Number 16/152,621 filed on October 5, 2018
- (ii) the above-identified Application is/was made or authorized to be made by me;
- (iii) I believe I am the original inventor or an original joint inventor of a claimed invention in the above-identified Application; and
- (iv) I hereby 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.

WHEREAS, Assignor wishes to assign to Assignee, and Assignee wishes to acquire, the entire right, title, and interest to the invention and the Application;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Assignor hereby sells, assigns, transfers and sets over to Assignee, and Assignee hereby accepts, the entire right, title and interest, for the United States of America and all other countries, in and to the invention and the Application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries for the invention, including without limitation all applications and patents for the invention claiming priority or benefit of the Application pursuant to any law or treaty, and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit, and the Commissioner of Patents and Trademarks and the Patent Office officials in foreign countries as are duly authorized by the respective foreign patent laws to issue patents are hereby authorized and requested to issue all patents on said improvements or resulting therefrom to Assignee, as assignee of the entire interest therein; and the Assignor does hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, continuation-in-part, reissue and other applications for Letters Patent on the invention and all assignments thereof to Assignee or its assigns, to communicate to Assignee or its representatives all facts known to the undersigned respecting the invention, whenever requested, to testify in any interferences or other legal proceedings in which the Application and any related applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid Assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by Assignee.

Assignor does hereby authorize the attorneys of Assignee and their assigns to insert on this Assignment the filing date and application number of said Application when known.

I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 62/569,035, filed October 6, 2017 ("Provisional"), and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of the Provisional pursuant to any law or treaty in the countries of the world.

**WARNING:** According to 37 C.F.R. 1.63 (c), "[a] person may not execute an oath or declaration unless the person has reviewed and understands the contents of the application, including claims and is aware of the duty to disclose to the Office all information known to be material to patentability as defined in 1.56."

**ASSIGNOR**

By: *Michael Chang*  
 Printed: Michael Chang  
 Title: Inventor  
 Date: 8/3/20  
 STATE OF Arizona

**ASSIGNEE**

By: *Greg Plaskon*  
 Printed: Greg Plaskon  
 Title: IP Agent  
 Date: August 4, 2020  
 STATE OF NJ

COUNTY OF Maricopa  
 The person whose name is subscribed to the accompanying instrument is personally known to me or has proved his/her identity to me on the basis of satisfactory evidence. On 8/3/20 he/she appeared before me and acknowledged that he/she has read the accompanying instrument and knows the contents thereof, and that he/she executed the same as their free act and deed for the purposes set forth therein. If he/she is acting on behalf of an entity, he/she also acknowledged that he/she executed the accompanying instrument in his/her authorized capacity, and that by his/her signature on the instrument, the entity executed the same.

COUNTY OF PASSAIC  
 The person whose name is subscribed to the accompanying instrument is personally known to me or has proved his/her identity to me on the basis of satisfactory evidence. On August 4, 2020 he/she appeared before me and acknowledged that he/she has read the accompanying instrument and knows the contents thereof, and that he/she executed the same as their free act and deed for the purposes set forth therein. If he/she is acting on behalf of an entity, he/she also acknowledged that he/she executed the accompanying instrument in his/her authorized capacity, and that by his/her signature on the instrument, the entity executed the same.

*M. Chang*  
 NOTARY PUBLIC  
 Residing at

*Greg Plaskon*  
 NOTARY PUBLIC

**PATENT**  
 REEL: 056028 FRAME: 0927

**CONFIRMATORY ASSIGNMENT FOR UTILITY APPLICATION**Docket Number (Optional)  
SPINE 3.0F-643Whereas, I, Steven F. Krause of  
22 Hickory Drive, Oakland, New Jersey 07436hereafter referred to as Assignor, have invented certain new and useful improvements in  
Pedicle Subtraction Osteotomy Guide for which a utility application for a United States Patent was filed on October 5, 2018  
Application Number 16/152,621 for which a utility application for a United States Patent was executed on \_\_\_\_\_

Whereas, I had an obligation to assign my rights in said invention and application to

**STRYKER EUROPEAN HOLDINGS III, LLC**

a limited liability company incorporated under the laws of the State of Delaware having its registered agent's address at

The Corporation Trust Company, 1209 Orange Street, Wilmington, 19801 Delaware, United States of America

who was desirous of acquiring the entire right, title and interest in the same;

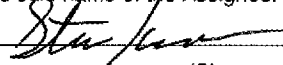
NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I as assignor, as of October 5, 2018, *nunc pro tunc*, hereby sells, assigns, transfers and sets over to Assignee, and Assignee hereby accepts, the entire right, title and interest, for the United States of America and all other countries, in and to the invention and the Application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries for the invention, including without limitation all applications and patents for the invention claiming priority or benefit of the Application pursuant to any law or treaty, and all rights under any International Conventions for the Protection of Intellectual Property, including the Paris Convention and the European Patent Convention and the corresponding rights to claim benefit from the priority of such applications and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit, and the Commissioner of Patents and Trademarks and the Patent Office officials in foreign countries as are duly authorized by the respective foreign patent laws to issue patents are hereby authorized and requested to issue all patents on said improvements or resulting therefrom to Assignee, as assignee of the entire interest therein; and the Assignor does hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, continuation-in-part, reissue and other applications for Letters Patent on the invention and all assignments thereof to Assignee or its assigns, to communicate to Assignee or its representatives all facts known to the undersigned respecting the invention, whenever requested, to testify in any interferences or other legal proceedings in which the Application and any related applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid Assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by Assignee.

I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 62/569,035, filed October 6, 2017 ("Provisional"), and in the invention disclosed thereto in all countries of the world including the right to claim priority or benefit of the Provisional pursuant to any law or treaty in the countries of the world.

Assignor does hereby authorize the attorneys of Assignee and their assigns to insert on this Assignment the filing date and application number of said Application when known. We hereby also declare that we agree that the Assignee may take steps for recordal of this Assignment in the sole name of the Assignee.

11/26/2019


(Date)



(Signature)

State of New Jersey ) SS:  
County of Morris )

On this 26 day of November, 2019 before me personally came the above-named Steven F. Krause, to me personally known as the individual who executed the foregoing instrument, who acknowledged to me that the same was executed by him/her of his/her own free will for the purposes therein set forth.

  
(Notary Public)**LINDA L. BRADEN**  
**NOTARY PUBLIC OF NEW JERSEY**  
**My Commission Expires 1/12/2023**

**CONFIRMATORY ASSIGNMENT FOR UTILITY APPLICATION**

Docket Number (Optional)  
SPINE 3.0F-643

Whereas, I, M. Todd Miller of 243 Hidden Pond Path, Franklin Lakes, New Jersey 07417

hereafter referred to as Assignor, have invented certain new and useful improvements in Pedicle Subtraction Osteotomy Guide

for which a utility application for a United States Patent was filed on October 5, 2018  
Application Number 16/152,621

for which a utility application for a United States Patent was executed on \_\_\_\_\_

Whereas, I had an obligation to assign my rights in said invention and application to

STRYKER EUROPEAN HOLDINGS III, LLC

a limited liability company incorporated under the laws of the State of Delaware having its registered agent's address at

The Corporation Trust Company, 1209 Orange Street, Wilmington, 19801 Delaware, United States of America

who was desirous of acquiring the entire right, title and interest in the same;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I as assignor, as of October 5, 2018, *nunc pro tunc*, hereby sells, assigns, transfers and sets over to Assignee, and Assignee hereby accepts, the entire right, title and interest, for the United States of America and all other countries, in and to the Invention and the Application and all original, divisional, continuation, continuation-in-part, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries for the Invention, including without limitation all applications and patents for the Invention claiming priority or benefit of the Application pursuant to any law or treaty, and all rights under any International Conventions for the Protection of Intellectual Property, including the Paris Convention and the European Patent Convention and the corresponding rights to claim benefit from the priority of such applications and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit, and the Commissioner of Patents and Trademarks and the Patent Office officials in foreign countries as are duly authorized by the respective foreign patent laws to issue patents are hereby authorized and requested to issue all patents on said improvements or resulting therefrom to Assignee, as assignee of the entire interest therein; and the Assignor does hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, continuation-in-part, reissue and other applications for Letters Patent on the Invention and all assignments thereof to Assignee or its assigns, to communicate to Assignee or its representatives all facts known to the undersigned respecting the Invention, whenever requested, to testify in any interferences or other legal proceedings in which the Application and any related applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid Assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by Assignee.

I, as assignor, hereby assign to said assignee all of my right, title and interest in United States Provisional Application No. 82/569,035, filed October 6, 2017 ("Provisional"), and in the invention disclosed therein in all countries of the world including the right to claim priority or benefit of the Provisional pursuant to any law or treaty in the countries of the world.

Assignor does hereby authorize the attorneys of Assignee and their assigns to insert on this Assignment the filing date and application number of said Application when known. We hereby also declare that we agree that the Assignee may take steps for recordal of this Assignment in the sole name of the Assignee.

November 27, 2019

(Date)

[Signature]

(Signature)

State of New Jersey ) ss:

County of Bergen )

On this 27 day of Nov, 2019, before me personally came the above-named M. Todd Miller, to me personally known as the individual who executed the foregoing instrument, who acknowledged to me that the same was executed by him/her of his/her own free will for the purposes therein set forth.

Ashley M. Salerno  
(Notary Public)

