506235463 09/03/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6282207

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
AMIT GOYAL	09/01/2020
MICHAEL A. GREMINGER	08/12/2020
BRIAN J. KROHN	08/20/2020

RECEIVING PARTY DATA

Name:	REGENTS OF THE UNIVERSITY OF MINNESOTA
Street Address:	600 MCNAMARA ALUMNI CENTER
Internal Address:	200 OAK STREET SE
City:	MINNEAPOLIS
State/Country:	MINNESOTA
Postal Code:	55455

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15621096

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: request@slwip.com

Correspondent Name: SCHWEGMAN LUNDBERG & WOESSNER P.A.

Address Line 1: P.O. BOX 2938

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	600.997US1
NAME OF SUBMITTER:	ERIKA WATKINS
SIGNATURE:	/ Erika Watkins /
DATE SIGNED:	09/03/2020

Total Attachments: 10

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PATENT 506235463 REEL: 053683 FRAME: 0749

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PATENT REEL: 053683 FRAME: 0750

RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: 600.997US1 Patent and Trademark Office To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. Name and address of receiving party(ies): 1. Name of conveying party(ies): Name: Regents of the University of Minnesota Amit Goyal, Michael A. Greminger, Brian J. Krohn Street Address: 600 McNamara Alumni Center Additional name(s) of conveying party(ies) attached? 200 Oak Street SE [Yes XNo City: Minneapolis State: MN Zip: 55455-2020 Country: United States of America 3. Nature of conveyance: Additional name(s) & address(es) attached? []Yes XNo [X] Assignment [] Merger [] Security Agreement[] Change of Name [] Other Execution Date: September 1, 2020, August 12, 2020, August 20, 2020 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) Serial No. 15/621,096 Additional numbers attached? []Yes [X]No 6. Total number of applications and patents involved: 1 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41):\$ <u>0.00</u> Name: Alison N. Sachs [[Enclosed []Authorized to be charged to deposit account Address: 19-0743 Schwegman Lundberg & Woessner, P.A. P.O. Box 2938 8. Please charge any additional fees or credit any over Minneapolis, Minnesota 55402 payments to our Deposit Account No.: 19-0743 DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. /Alison N. Sachs/ September 3, 2020 Alison N. Sachs/Reg. No. 63,776 Signature Date Name of Person Signing Total number of pages including cover sheet: 10 Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks

Mail Stop Assignment Recordation Services

P.O. Box 1450

Alexandria, VA 22313-1450

PATENT REEL: 053683 FRAME: 0751



University of Minnesota <u>ASSIGNMENT</u>

WHEREAS I, Amit Goyal, have invented certain new and useful improvements in TISSUE DETECTION SYSTEM WITH A POLYMER NEEDLE, for which application for Letters Patent of the United States has been made, said application being filed as follows: Utility application no. 15/621,096 on June 13, 2017 ("Application(s)");

WHEREAS, REGENTS OF THE UNIVERSITY OF MINNESOTA ("Assignee"), having offices at 600 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2020, is desirous of documenting the acquisition of the entire right, title and interest in and to said invention, said Application(s) and in, to and under any and all Letters Patent to be obtained therefor;

WHEREAS, I hereby acknowledge an obligation of assignment of the inventions disclosed in the Application(s) to Assignee at the time the invention(s) was made;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and to the extent that I have not done so already via a prior agreement with the Assignee, or if I have already done so via a prior agreement with the Assignee then in confirmation of said prior agreement, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Assignee, its successors and assigns, the entire right, title and interest in and to the inventions set forth hereinabove and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor on the Application(s) including rights of priority under the Paris Convention for the Protection of Industrial Property and the European Patent Convention, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Application(s) and Letters Patent that may be granted, including all rights to claim priority therefrom, and specifically including the right to enforce such Letters Patent in the name of Assignee and to recover damages for past infringement of the rights conveyed herein, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of 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 me had this assignment and sale not been made.

I hereby authorize said Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of any the Application(s) and/or otherwise take advantage of all rights of priority created by said Application(s) under any treaty relating thereto (including the right to claim priority to said patent application, e.g., under the provisions of the Paris Convention for the Protection of Industrial Property and the European Patent Convention).

Attorney Docket No. 600.997US1 UM Case No. 20160281

PATENT

Upon said consideration I do hereby covenant and agree with said Assignee, its successors and assigns, that I will not execute in writing or do any act whatsoever conflicting with these presents, and that I or my executors or administrators will at any time upon request, without further or additional consideration, but at the expense of said Assignee, its successors and assigns, execute such additional writings and do such additional acts as said Assignee, its successors and assigns, may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, reissues or extended Letters Patent of the United States, or of any and all foreign countries on said invention, and in enforcing any rights occurring as a result of such application or patents, by giving testimony in any proceedings or transactions involving such applications or patents.

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

I have hereunto set my hand on September 1, 2020 | 3:22 PM CDT

----- DocuSigned by:

Amit Goyal ----94719BB456B7433...

Amit Goval

Attorney Docket No. 600.997US1 UM Case No. 20160281 I have hereunto set my hand on September 1, 2020 | 3:52 PM CDT , on behalf of Assignee Regents of the University of Minnesota accepting this assignment.

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REGENTS OF THE UNIVERSITY OF MINNESOTA

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DocuSigned by:

Carol Grutkoski Chief of Staff and Operations Manager per Presidential Delegation ID_257866

Attorney Docket No. 600.997US1 UM Case No. 20160281

PATENT



University of Minnesota ASSIGNMENT

WHEREAS I, Michael A. Greminger, have invented certain new and useful improvements in TISSUE DETECTION SYSTEM WITH A POLYMER NEEDLE, for which application for Letters Patent of the United States has been made, said application being filed as follows: Utility application no. 15/621,096 on June 13, 2017 ("Application(s)");

WHEREAS, REGENTS OF THE UNIVERSITY OF MINNESOTA ("Assignee"), having offices at 600 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2020, is desirous of documenting the acquisition of the entire right, title and interest in and to said invention, said Application(s) and in, to and under any and all Letters Patent to be obtained therefor;

WHEREAS, I hereby acknowledge an obligation of assignment of the inventions disclosed in the Application(s) to Assignee at the time the invention(s) was made;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and to the extent that I have not done so already via a prior agreement with the Assignee, or if I have already done so via a prior agreement with the Assignee then in confirmation of said prior agreement, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Assignee, its successors and assigns, the entire right, title and interest in and to the inventions set forth hereinabove and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor on the Application(s) including rights of priority under the Paris Convention for the Protection of Industrial Property and the European Patent Convention, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Application(s) and Letters Patent that may be granted, including all rights to claim priority therefrom, and specifically including the right to enforce such Letters Patent in the name of Assignee and to recover damages for past infringement of the rights conveyed herein, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of 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 me had this assignment and sale not been made.

I hereby authorize said Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of any the Application(s) and/or otherwise take advantage of all rights of priority created by said Application(s) under any treaty relating thereto (including the right to claim priority to said patent application, e.g., under the provisions of the Paris Convention for the Protection of Industrial Property and the European Patent Convention).

Attorney Docket No. 600.997US1 UM Case No. 20160281

PATENT

Upon said consideration I do hereby covenant and agree with said Assignee, its successors and assigns, that I will not execute in writing or do any act whatsoever conflicting with these presents, and that I or my executors or administrators will at any time upon request, without further or additional consideration, but at the expense of said Assignee, its successors and assigns, execute such additional writings and do such additional acts as said Assignee, its successors and assigns, may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, reissues or extended Letters Patent of the United States, or of any and all foreign countries on said invention, and in enforcing any rights occurring as a result of such application or patents, by giving testimony in any proceedings or transactions involving such applications or patents.

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

I have hereunto set my hand on August 12, 2020 | 10:00 AM CDT

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Michael A. Greminger

Attorney Docket No. 600.997US1 UM Case No. 20160281 I have hereunto set my hand on August 20, 2020 | 2:07 PM CDT , on behalf of Assignee Regents of the University of Minnesota accepting this assignment.

REGENTS OF THE UNIVERSITY OF MINNESOTA

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DocuSigned by:

Carol Grutkoski Chief of Staff and Operations Manager per Presidential Delegation ID_257866

Attorney Docket No. 600.997US1 UM Case No. 20160281

PATENT



University of Minnesota ASSIGNMENT

WHEREAS I, Brian J. Krohn, have invented certain new and useful improvements in TISSUE DETECTION SYSTEM WITH A POLYMER NEEDLE, for which application for Letters Patent of the United States has been made, said application being filed as follows: Utility application no. 15/621,096 on June 13, 2017 ("Application(s)");

WHEREAS, REGENTS OF THE UNIVERSITY OF MINNESOTA ("Assignee"), having offices at 600 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2020, is desirous of documenting the acquisition of the entire right, title and interest in and to said invention, said Application(s) and in, to and under any and all Letters Patent to be obtained therefor:

WHEREAS, I hereby acknowledge an obligation of assignment of the inventions disclosed in the Application(s) to Assignee at the time the invention(s) was made;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and to the extent that I have not done so already via a prior agreement with the Assignee, or if I have already done so via a prior agreement with the Assignee then in confirmation of said prior agreement, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Assignee, its successors and assigns, the entire right, title and interest in and to the inventions set forth hereinabove and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor on the Application(s) including rights of priority under the Paris Convention for the Protection of Industrial Property and the European Patent Convention, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Application(s) and Letters Patent that may be granted, including all rights to claim priority therefrom, and specifically including the right to enforce such Letters Patent in the name of Assignee and to recover damages for past infringement of the rights conveyed herein, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of 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 me had this assignment and sale not been made.

I hereby authorize said Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of any the Application(s) and/or otherwise take advantage of all rights of priority created by said Application(s) under any treaty relating thereto (including the right to claim priority to said patent application, e.g., under the provisions of the Paris Convention for the Protection of Industrial Property and the European Patent Convention).

Attorney Docket No. 600.997US1 UM Case No. 20160281

PATENT

Upon said consideration I do hereby covenant and agree with said Assignee, its successors and assigns, that I will not execute in writing or do any act whatsoever conflicting with these presents, and that I or my executors or administrators will at any time upon request, without further or additional consideration, but at the expense of said Assignee, its successors and assigns, execute such additional writings and do such additional acts as said Assignee, its successors and assigns, may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, reissues or extended Letters Patent of the United States, or of any and all foreign countries on said invention, and in enforcing any rights occurring as a result of such application or patents, by giving testimony in any proceedings or transactions involving such applications or patents.

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

I have hereunto set my hand on August 20, 2020 | 12:03 PM PDT

DocuSigned by:

Brian J. Erolin

Brian J. Krohn

Attorney Docket No. 600.997US1 UM Case No. 20160281 I have hereunto set my hand on August 20, 2020 | 2:07 PM CDT , on behalf of Assignee Regents of the University of Minnesota accepting this assignment.

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REGENTS OF THE UNIVERSITY OF MINNESOTA

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Carol Grutkoski Chief of Staff and Operations Manager per Presidential Delegation ID_257866

Attorney Docket No. 600.997US1 UM Case No. 20160281

PATENT