#### 507014045 12/07/2021

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7060879

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

# **CONVEYING PARTY DATA**

Name	Execution Date
MOHAMMED HUSSAIN ABDUL JABBAR	08/23/2016
KE-JI PAN	08/23/2016
ERIC WACHSMAN	08/29/2016

# **RECEIVING PARTY DATA**

Name:	UNIVERSITY OF MARYLAND, COLLEGE PARK	
Street Address:	0134 LEE BUILDING, 7809 REGENTS DRIVE	
Internal Address:	UM VENTURES	
City:	COLLEGE PARK	
State/Country:	MARYLAND	
Postal Code:	20742	

# **PROPERTY NUMBERS Total: 3**

Property Type	Number	
Application Number:	62399016	
Application Number:	62562742	
Application Number:	16141051	

# **CORRESPONDENCE DATA**

Fax Number: (301)314-9502

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: 3014056269

Email: cthomp19@umd.edu

UNIVERSITY OF MARYLAND, COLLEGE PARK **Correspondent Name:** 0134 LEE BUILDING, 7809 REGENTS DRIVE Address Line 1:

Address Line 2: **UM VENTURES** 

Address Line 4: COLLEGE PARK, MARYLAND 20742

ATTORNEY DOCKET NUMBER:	PS-2016-130
NAME OF SUBMITTER:	CHARLENE E. THOMPSON
SIGNATURE:	/Charlene E. Thompson/
DATE SIGNED:	12/07/2021

**PATENT REEL: 058326 FRAME: 0076** 507014045

# Total Attachments: 10 source=PS-2016-130 - Assignment for Countersignature - signed#page1.tif source=PS-2016-130 - Assignment for Countersignature - signed#page2.tif source=PS-2016-130 - Assignment for Countersignature - signed#page3.tif source=PS-2016-130 - Assignment for Countersignature - signed#page4.tif source=US Patent appl. No. 16-141051\_Hussain (1)#page1.tif source=US Patent appl. No. 16-141051\_Hussain (1)#page2.tif source=US Patent appl. No. 16-141051\_Hussain (1)#page3.tif source=US Patent appl. No. 16-141051\_Hussain-Wachsman#page1.tif source=US Patent appl. No. 16-141051\_Hussain-Wachsman#page2.tif source=US Patent appl. No. 16-141051\_Hussain-Wachsman#page3.tif

PATENT REEL: 058326 FRAME: 0077

THIS AGREEMENT by and between: Mohammed Hussain Abdul Jabbar an individual having a principal residence at 9348 Cherry Hill Road #522 Collage Park MD 20740 (hereinafter referred to as "Assignor"), and the University of Maryland, College Park (hereinafter referred to as "Assignee").

# WITNESSETH:

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. **PS-2016-130** entitled

# Chromate based Ceramic Anode Materials for Solid Oxide Fuel Cells

and for any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filed in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act. (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the University of Maryland Policy on Intellectual Property, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

# Section 1. <u>Assignment of the Works.</u>

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation), (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interest under applicable law; and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

# Section 2. University of Maryland Policy on Intellectual Property.

The assignment of rights perfected hereunder shall be governed by the University of Maryland Policy on Intellectual Property as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in this policy.

# Section 3. Warranty

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

# Section 4. Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

WHEREAS, the parties have caused this Assignment to be executed on the dates below.

**ASSIGNOR** 

Agreed to by:

Printed Name: Mohammed Hussain Abdul Jabbar

Inventor

Date:

ASSIGNEE (University of Maryland)

Acknowledged and Agreed to by:

Printed Name: Felicia Metz

Title: Sr. intellectual Property Manager Associate Director

Date: Sep 17, 2021

Edward 1887

PATENT REEL: 058326 FRAME: 0078

THIS AGREEMENT by and between:

Ke-Ji Pan

an individual having a principal residence at

Park (hereinafter referred to as "Assignee").

12010 Chase Crossing Cir#302 North Bethesda MD 20852 (hereinafter referred to as "Assignor"), and the University of Maryland, College

# WITNESSETH:

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. PS-2016-130 entitled

# Chromate based Ceramic Anode Materials for Solid Oxide Fuel Cells

and for any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filed in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"), and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act, (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the University of Maryland Policy on intellectual Property, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

# Assignment of the Works.

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation), (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interest under applicable law, and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

#### Section 2. University of Maryland Policy on Intellectual Property.

The assignment of rights perfected hereunder shall be governed by the University of Maryland Policy on Intellectual Property as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in this policy.

#### Section 3. Warranty.

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

#### Section 4. Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

WHEREAS, the parties have caused this Assignment to be executed on the dates below.

ASSIGNOR

Agreed to by: Printed Name: Ke-Ji Pan

Date

ASSIGNEE (University of Maryland) Acknowledged and Agreed to by:

Printed Name: Felicia Metz

Title: Sr. Intellectual Property Manager Associate Director

Realiter

Sep 17, 2021

THIS AGREEMENT by and between:

Eric Wachsman

an individual having a principal residence at

9469 Lovat Rd.

MD 20759 (hereinafter referred to as "Assignor"), and the University of Maryland, College

Park (hereinafter referred to as "Assignee").

WITNESSETH:

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. PS-2016-130 entitled

# Chromate based Ceramic Anode Materials for Solid Oxide Fuel Cells

and for any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filled in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act. (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the University of Maryland Policy on Intellectual Property, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

#### Section 1. Assignment of the Works.

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation), (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interest under applicable law, and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

#### Section 2. University of Maryland Policy on Intellectual Property.

The assignment of rights perfected hereunder shall be governed by the University of Maryland Policy on Intellectual Property as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in this policy.

# Section 3.

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

# Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of

WHEREAS, the parties have caused this Assignment to be executed on the dates below.

ASSIGNOR

Agreed to by: 4 Printed Name: Eric Wachsman

ASSIGNEE (University of Maryland)

Acknowledged and Agreed to by:

Felix No

Printed Name: Felicia Metz

Title: Sr. Intellectual Property Manager Associate Director

Date

Sep 17, 2021

# PS-2016-130 - Assignment for Countersignature

Final Audit Report 2021-09-17

Created: 2021-09-16

By: Charlene Thompson (cthomp19@umd.edu)

Status: Signed

Transaction ID: CBJCHBCAABAAjWOzDvRnxxy3JP0FVARIeYqFpbjBJj8n

# "PS-2016-130 - Assignment for Countersignature" History

Document created by Charlene Thompson (cthomp19@umd.edu) 2021-09-16 - 7:48:35 PM GMT- IP address: 129.2.181.69

Document emailed to Felicia Metz (fametz@umd.edu) for signature 2021-09-16 - 7:49:35 PM GMT

Email viewed by Felicia Metz (fametz@umd.edu)
2021-09-17 - 5:03:20 PM GMT- IP address: 66.102.8.169

Document e-signed by Felicia Metz (fametz@umd.edu)

Signature Date: 2021-09-17 - 5:05:01 PM GMT - Time Source: server- IP address: 108.28.144.43

Agreement completed. 2021-09-17 - 5:05:01 PM GMT

REEL: 058326 FRAME: 0081

THIS AGREEMENT by and between:

Assignor(s)	An individual having a principal residence at		
Eric D. Wachsman	1205 Engineering Lab Building		
	8136 Paint Branch Drive		
	CAMPUS 20742		
	United States		
Mohammed Hussain Abdul Jabbar	12068 Engineering Lab Bldg.		
	CAMPUS		
	College Park, MD 20742		
	United States		
Ke-Ji Pan	Room 1205 Engineering Lab Bidg		
	College Park, MD 20742		
^	United States		

(hereinafter referred to individually as "Assignor" and collectively as "Assignors") and the University of Maryland, College Park (hereinafter referred to as "Assignee").

# WITNESSETH

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. PS-2016-130 entitled,

# "Chromate Based Ceramic Anode Materials for Solid Oxide Fuel Cells"

and further described in the patent applications listed in Appendix A and any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filled in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act, (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the <u>University of Maryland Policy on Intellectual Property</u>, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

# Section 1. Assignment of the Works.

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation). (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interest under applicable law; and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

# Section 2. University of Maryland Copyright and Patent Policies.

The assignment of rights perfected hereunder shall be governed by the <u>University of Maryland Policy on Intellectual Property</u> as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in those policies.

# Section 3. Warranty.

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

# Section 4. Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

WHEREAS, the parties have caused this As	signment to be executed on the dates below.					
ASSIGNOR Agreed to by:	ASSIGNOR Agreed to by					
Printed Name: <u>Eric D. Wachsman</u> Inventor	Printed Name:	Mohammed Hussain Abdul Jabi Inventor				
Date:	Date:	09/17/2021				
ASSIGNOR Agreed to by:	,					
Printed Name: <u>Ke-Ji Pan</u> Inventor						
Date:						
ASSIGNEE (University of Maryland) Acknowledged and Agreed to by:						
Printed Name:						
Title:						

Date:

# APPENDIX A

Country	Application Date	Application No.	Patent No.	Issue Date	Status	Exp Date	Docket No.
United States	Sep 23, 2016	62/399016			Expired		PS-2016- 130-01
United States	Sep 25, 2017	62/562742			Expired		PS-2016- 130-02
United States	Sep 25, 2018	16/141051			Pending ~ Published		PS-2016- 130-03

THIS AGREEMENT by and between:

Assignor(s)	An individual having a principal residence at
Eric D. Wachsman	1205 Engineering Lab Building
	8136 Paint Branch Drive
	CAMPUS 20742
	United States
Mohammed Hussain Abdul Jabbar	1206B Engineering Lab Bldg.
	CAMPUS
	College Park, MD 20742
	United States
Ke-Ji Pan	Room 1205 Engineering Lab Bidg
	College Park, MD 20742
^	United States

(hereinafter referred to individually as "Assignor" and collectively as "Assignors") and the University of Maryland, College Park (hereinafter referred to as "Assignee").

# WITNESSETH

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. PS-2016-130 entitled,

# "Chromate Based Ceramic Anode Materials for Solid Oxide Fuel Cells"

and further described in the patent applications listed in Appendix A and any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filled in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act, (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the <u>University of Maryland Policy on Intellectual Property</u>, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

# Section 1. Assignment of the Works.

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation). (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interest under applicable law; and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

# Section 2. University of Maryland Copyright and Patent Policies.

The assignment of rights perfected hereunder shall be governed by the <u>University of Maryland Policy on Intellectual Property</u> as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in those policies.

# Section 3. Warranty.

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

# Section 4. Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

ASSIGNOR Agreed to by:  Tic Wachsman	ASSIGNOR Agreed to by	prakuel.		
Printed Name. <u>Eric D. Wachsman</u> Inventor	Printed Name:	Mohammed Hussain Abdul Jab Inventor		
Date: 09/17/21	Date:	09/17/2021		
ASSIGNOR Agreed to by:				
Printed Name: <u>Ke-Ji Pan</u> Inventor				
Date				
ASSIGNEE (University of Maryland) Acknowledged and Agreed to by				
Printed Name:				
Title:				

WHEREAS, the parties have caused this Assignment to be executed on the dates below.

Date:

# APPENDIX A

Country	Application Date	Application No.	Patent No.	Issue Date	Status	Exp Date	Docket No.
United States	Sep 23, 2016	62/399016			Expired		PS-2016- 130-01
United States	Sep 25, 2017	62/562742			Expired		PS-2016- 130-02
United States	Sep 25, 2018	16/141051			Pending ~ Published		PS-2016- 130-03

Page 3 of 3

PATENT REEL: 058326 FRAME: 0087

**RECORDED: 12/07/2021**