506906390 10/05/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6953214

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JAY ASHOK SHENDURE	08/14/2019
JERROD JOSEPH SCHWARTZ	08/19/2019
ANDREW COLIN ADEY	08/19/2019
CHO LI LEE	08/14/2019
JOSEPH BRIAN HIATT	08/14/2019
JACOB OTTO KITZMAN	08/13/2019
AKASH KUMAR	08/19/2019

RECEIVING PARTY DATA

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City:	SEATTLE
State/Country:	WASHINGTON
Postal Code:	98105

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16665800

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	3915-P866US.CON.UW
NAME OF SUBMITTER:	SHERLIN YAGHOUBZADEH
SIGNATURE:	/Sherlin Yaghoubzadeh/

PATENT 506906390 REEL: 057704 FRAME: 0662

DATE SIGNED:	10/05/2021
Total Attachments: 10	
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PATENT REEL: 057704 FRAME: 0663

PCT/US2012/023679

U.S. Application No.: 13/513309

ASSIGNMENT OF INVENTION AND PATENT RIGHTS

("Assignment")

Inventors: Jay Ashok Shendure, Jerrod Joseph Schwartz, Andrew Colin Adey, Cho li Lee, Joseph Brian Hiatt, Jacob Otto Kitzman, and Akash Kumar

Serial No: PCT/US2012/023679 (now U.S. Patent Application No. 13/513309)

Filing Date: February 2, 2012

WHEREAS: Jay Ashok Shendure, Jerrod Joseph Schwartz, Andrew Colin Adey, Cho li Lee, Joseph Brian Hiatt, Jacob Otto Kitzman, and Akash Kumar (collectively hereinafter Inventor(s) and ASSIGNOR(S)) have invented, made, or discovered certain new and useful improvements in the following invention:

MASSIVELY PARALLEL CONTIGUITY MAPPING

including works and technology, whether or not patentable and whether or not included in a patent application for which International Patent Application No. PCT/US2012/023679 was filed on February 2, 2012 (now U.S. Patent Application No. 13/513309),

WHEREAS:

University of Washington through its Center for Commercialization, a public institution of higher education in the State of Washington, having a place of business at Seattle, Washington, (hereinafter ASSIGNEE), is desirous of acquiring the entire right, title, and interest in, to, and under said invention and in and to all embodiments of the invention, heretofore conceived, made or discovered, whether jointly or severally, by said inventor(s) (hereinafter collectively referred to as "Inventions"), and in, to, and under any Letters Patent, patent applications (including all patent applications that share or claim the benefit, right of priority, and/or right to grant to or from the patent application(s), hereinafter "Applications" under any international convention), inventor's certificates or similar legal protection to be obtained therefor in the United States and its territorial possessions, in any and all foreign countries, or under any international convention, agreement, protocol, or treaty, including those filed under the Paris Convention for the Protection of Industrial Property, The Patent Cooperation Treaty or otherwise (hereinafter "Patent(s)").

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged by Inventor(s):

ASSIGNORS hereby do sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives and assigns, the full, entire and exclusive rights, titles, and interests: a) in and to said Inventions; b) in and to said Applications, including the right to claim the benefit, right of priority, and/or right to grant to or from said Application(s); c) in and to each and every application that is a divisional, substitution,

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continuation, or continuation-in-part of any of said Application(s); d) in and to said Patent(s) and each and every patent issuing or reissuing from any of the foregoing; e) in and to each and every reissue, reexamination, renewal or extension of any kind of any of the foregoing; f) in and to each and every patent and application filed the United States or filed outside the United States and corresponding to the Inventions or claim the benefit, right of priority, and right to grant to or from the Applications or Patents; and g) in and to all claims for past, present and future infringement of the Patent(s), including all rights to sue for and to receive and recover for ASSIGNEE'S own use all past, present, and future lost profits, royalties, and damages of whatever nature recoverable from an infringement of the Patent(s).

ASSIGNOR(S) hereby authorize and request that any Patent(s) issuing in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, be issued in the name of the ASSIGNEE, or its successors and assigns, for the sole use of said ASSIGNEE, its successors, legal representatives and assigns.

ASSIGNOR(5) hereby warrant, represent, and covenant that said Inventors have full right to convey the entire right, title, and interest herein sold, assigned, transferred, and set over and have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

ASSIGNOR(S) hereby covenant and agree to cooperate with said ASSIGNEE to enable said ASSIGNEE to enjoy to the fullest extent the right, title and interest herein conveyed in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty. Such cooperation by said ASSIGNOR(5) shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said ASSIGNEE (a) for perfecting in said ASSIGNEE the right, title and interest herein conveyed, to include executing and delivering any and all lawful papers that may be necessary or desirable to perfect the title to the said invention, the said Application(s) and the said Patent(s) in the name of said ASSIGNEE, its successors, legal representatives, and assigns; (b) for prosecuting any applications covering said Inventions, including complying with the said Inventor(s)' duty of candor; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Inventions; (d) for filing and prosecuting applications for reissuance of any said Patent(s); (e) for interference, inter partes review, or other priority proceedings involving said inventions; and (f) for legal proceedings involving said inventions, said Applications, and said Patent(s), including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that reasonable expenses incurred by said inventor(s) in providing such cooperation shall be paid for by said ASSIGNEE.

The undersigned hereby grant(s) ASSIGNEE or the firm of Christensen O'Connor Johnson Kindness PLLC the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent Office and the Patent Offices, or equivalent thereof of any and all foreign countries.

The terms and covenants of this Assignment shall inure to the benefit of said ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns.

IN WITNESS WHEREOF, said Inventor(s) have executed and delivered this instrument to said Assignee as of the dates written below:

PATENT REEL: 057704 FRAME: 0665

PCT/US2012/023679

U.S. Application No.: 13/513309

Witnesses completing this section verify only the identity of the individual who signed the document to which this section is attached, and not the truthfulness, accuracy, or validity of that document.

Signature: Witness: (printed name) (printed name)	ay Ashok Shendure (Printed name)	\$
Witness:	ixecuted at <u>SEQHIC</u> (city), Washington	, this 14 day of August, 2019.
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Date: 8/14/19 Dete:		Trunifer Miggard
lerrod Joseph Schwartz (Printed name) Executed at		(printed name)
Jerrod Joseph Schwartz (Printed name) Executed at	Date: 8/14/19	Date: 8/14/19
Executed at (city), Washington, this day of, 2019. Signature: Witness: (printed name) (printed name)		********************************
Signature: Witness: (printed name) (printed name)	, , , , , , , , , , , , , , , , , , , 	
Witness: (printed name) Witness: (printed name)	Executed at(city), Washington	s, this day of 2019.
(printed name) (printed name)	Signature:	*
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(printed name) (printed name)	Witness:	Witness:
(printed name) (printed name)		
Date: Date:		
	Date:	Date:

PCT/US2012/023679

U.S. Application No.: 13/513309

Witnesses completing this section verify only the identity of the individual who signed the document to which this section is attached, and not the truthfulness, accuracy, or validity of that document.

Jay Ashok Shendure (Printed n Executed at		this day of	2019
Signature:		this day or	, 2013.
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Witness:		Witness:	
(printed name)		(printed name)	
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Executed at SOUTH SAN FRAN	CALIF <i>deNIA</i> (city), Washingto n,	this 19th day of AUGU	⊆========= ⊆T , 2019.
Executed at South SAN FRAN Signature: Juna Mun Witness: Munra Maxwell Muma(h	CALIF <i>deNIA</i> (city), Washingto n,	Witness: Color Eva Alder	ST_, 2019.
Executed at South SAN FRAN Signature: Sund Munu Witness:	CALIF <i>deNIA</i> (city), Washingto n,	Witness: Color Odder (printed name)	ST, 2019.

Page 4 of 7	Attorney Docket No.: UWOTL-1-5781; PCT/US2012/02367; U.S. Application No.: 13/S1330;
Andrew Colin Adey (Printed name) Frequency Port-Land Con	edun impton, this 17 day of Avgust 2019.
Signature:	
Witness:	Witness Fills
Ayen Mujuten	Andrew Fields (printed name) Date: 8/19/2019
Date: 8/17/2019	Date: 8/19/2019
Cho li Lee (Printed name)	
Executed at(city), War	hington, this day of 2019.
Signature:	
Witness:	Witness:

(printed name)

(printed name)

PATENT REEL: 057704 FRAME: 0668

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U.S. Application No.: 13/513309

	shington, this day of, 2019.
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tho li Lee (Printed name) xecuted at(city), Waignature:	ashington, this <u>//f</u> day of <u>Agast</u> , 2019.
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and the state of t	(printed name)
printed name) Date: 8/14/2019	Date: 8/14/2019

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U.S. Application No.: 13/513309

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Executed at Scattle	(city), Washington, this 14 day of Augus 7, 2019.
Signature: A. F	J
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Justa Norton	Adugart
Justin Nortan printed name)	Arnaud Auger (printed name)
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Date: 8/14/19	Date: 08/14/19
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acob Otto Kitzman (Printed name)	
executed at(city), Washington, this day of, 2019.
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U.S. Application No.: 13/513309

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Iacob Otto Kitzman (Printed name Executed at AAA Arbo	e) Jacob Kitan, Michig (city), Washington	12/2 this 13/2	day of <u>・</u> Aンら	,∪1
Iacob Otto Kitzman (Printed nam Executed at AAA Arbor Signature: 4	e) Jacob Kitzm. Michig (city), Washington,	Witness:	<u>Luobs</u>	inen
Executed at AAA Arbor Signature: Witned: KIMBERLY A. (printed name)	lite	Witness:	<u>Luobs</u>	

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Attorney Docket No.: UWOTL-1-57812

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U.S. Application No.: 13/513309

<u>Akash Kumar</u> (Printed name)	a california
xecuted at	Ocity), Washington, this 19 day of Angust 2019.
Signature/	
S. L. Linden Co.	
iðlikmare.	W/Smare.
	Witness: // n
Dena Matalon	Heilhel Brex
(printed name)	(printed name)
8/1a/19	ome X/10/10
Date: <u>0 </u>	Date: <u>& / 19 / U</u>

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U.S. Application No.: 13/513309

ACCEPTANCE BY ASSIGNEE:

RECEIVED AND AGREED TO BY ASSIGNEE: University of Washington through its Center for Commercialization

Date: August 19 2019 Witness signature: Witness: Witness: (printed name) (printed name) Date: 8/19/19

> PATENT REEL: 057704 FRAME: 0673

RECORDED: 10/05/2021