505473686 05/13/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5520490

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PHILLIP PHAM	08/30/2013
SALIL DESHPANDE	09/03/2013

RECEIVING PARTY DATA

Name:	CYPHER GENOMICS, INC.	
Street Address:	4225 EXECUTIVE SQUARE	
Internal Address:	SUITE 460	
City:	LA JOLLA	
State/Country:	CALIFORNIA	
Postal Code:	92037	

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	15222795
Application Number:	16238448

CORRESPONDENCE DATA

Fax Number: (650)815-7401

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: 650-815-7400

Email: npizzo@mwe.com, ipdocketsiliconvalley@mwe.com

Correspondent Name: ROGER C. KUAN - MCDERMOTT WILL & EMERY LLP

Address Line 1: THE MCDERMOTT BUILDING
Address Line 2: 500 NORTH CAPITAL STREET, NW

Address Line 4: WASHINGTON, D.C. 20001

ATTORNEY DOCKET NUMBER:	095515-0132	
NAME OF SUBMITTER:	ROGER C. KUAN, REG. NO. 56,558	
SIGNATURE:	/Roger C. Kuan/	
DATE SIGNED:	05/13/2019	

Total Attachments: 8

source=095515-0019 (0132) - Assignment#page1.tif source=095515-0019 (0132) - Assignment#page2.tif

PATENT 505473686 REEL: 049163 FRAME: 0384

Application Data Sheet file previously or concurrently

Docket No.: CYPHR.002A Page 1 of 4

Title: SYSTEMS AND METHODS FOR GENOMIC VARIANT ANNOTATION

Inventors: Phillip Pham and Salil Deshpande

Declaration

This Declaration is directed to the application identified above that:

Was filed March 15, 2013 as U.S. or International Application No. 13/841,575 and incorporating any amendments made thereto prior to the signature date of this Declaration.

As a named inventor, I declare that:

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

Assignment from inventors

WHEREAS, above-identified inventors (individual(s) hereinafter "ASSIGNOR") invented certain new and useful improvements, technology, inventions, developments, ideas, ornamental designs, or discoveries, and hereby assign or are under an obligation to assign to the below identified Assignee the above-titled application (collectively hereinafter referred to as the "Work") for which an application for Letters Patent in the United States (identified above) has been prepared for filing with the United States Patent and Trademark Office (hereinafter the "Application").

AND WHEREAS, **Cypher Genomics**, with its principal place of business at 4225 Executive Square, Suite 460, La Jolla, CA 92037 (hereinafter the "ASSIGNEE"), desires to acquire the entire right, title, and interest in and to the Application and the Work.

NOW, THEREFORE, for good and valuable consideration of which receipt is hereby acknowledged, ASSIGNOR hereby acknowledges that ASSIGNOR has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in the Application and the Work, including all patent properties filed or issued upon the Application and the Work; where "Patent Properties" include, but are not limited to:

all provisional applications relating thereto (including but not limited to U.S. Provisional Application No(s)., filed (respectively if plural applications));

all nonprovisional applications claiming priority to aforementioned provisional(s) and/or the present Application, including, all divisions, continuations, continuations-in-part, and reissues, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof; and

all rights of priority under International Conventions and any related Letters Patent which may hereafter be granted or filed in any country or countries foreign to the United States, all extensions, renewals and reissues thereof.

Application Data Sheet filed previously or concurrently

Docket No.: CYPHR.002A Page 2 of 4

Title: SYSTEMS AND METHODS FOR GENOMIC VARIANT ANNOTATION

Inventors: Phillip Pham and Salil Deshpande

ASSIGNOR hereby acknowledges the ASSIGNEE as the Applicant for all aforementioned patent properties, and authorizes and requests the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all related Letters Patent to the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND ASSIGNOR DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND ASSIGNOR DOES HEREBY covenant and agree that ASSIGNOR will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Work, and testify in any legal proceeding, assist in the preparation of any other Patent Property relating to the Application and the Work or any improvements made thereto, sign/execute all lawful papers, execute and make all rightful oaths and/or declarations in connection with the Application and the Work including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Work in all countries.

Application Data Sheet filed previously or concurrently

Docket No.: CYPHR.002A

Page 3 of 4

Title: SYSTEMS AND METHODS FOR GENOMIC VARIANT ANNOTATION

Inventors: Phillip Pham and Salii Deshpande

Legal Name of inventor: Phillip Pham

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 30 day of Augus

2013.

Signature:

Signature before a Notary is desirable but not required.

STATE OF CALIFORNIA

55.

On <u>0X/30/2-13</u>, before me. <u>James</u> <u>notary public</u>, personally appeared Phillip Pham who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/age subscribed to the within instrument, and acknowledged to me that he/she/they executed the same in his/har/their authorized capacity(iss), and that by his/har/thair signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoins

paragraph is true and correct.

WITNESS my hand and official seal.

[SEAL]

Notety-eignatur

JAMES ZIVKOVIC
Cemmission # 1941191
Notary Public - Califernia
San Diego County
My Comm. Expires Jun 17, 2015

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently		
Docket No.: CYPHR.002A Page 4 of 4		
Title: SYSTEMS AND METHODS FOR GENOMIC VARIANT ANNOTATION		
Inventors: Phillip Pham and Salil Deshpande		
Local Name of inventors Call Dechards		
Legal Name of inventor: Salil Deshpande		
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of 20		
Signature:		
Signature before a Notary is desirable but not required.		
STATE OF CALIFORNIA) > ss.		
COUNTY OF		
On, before me,, notary public, personally appeared Salil Deshpande who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.		
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.		

Notary Signature

15065918 073113

[SEAL]

WITNESS my hand and official seal.

Application Data Sheet filed previously or concurrently

Docket No.: CYPHR.002A Page 1 of 4

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Inventors: Phillip Pham and Salil Deshpande

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Assignment from Inventors

WHEREAS, above-identified inventors (individual(s) hereinafter "ASSIGNOR") invented certain new and useful improvements, technology, inventions, developments, ideas, ornamental designs, or discoveries, and hereby assign or are under an obligation to assign to the below identified Assignee the above-titled application (collectively hereinafter referred to as the "Work") for which an application for Letters Patent in the United States (identified above) has been prepared for filling with the United States Patent and Trademark Office (hereinafter the "Application").

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all provisional applications relating thereto (including but not limited to U.S. Provisional Application No(s)., filed (respectively if plural applications));

all nonprovisional applications claiming priority to aforementioned provisional(s) and/or the present Application, including, all divisions, continuations, continuations-in-part, and reissues, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof; and

all rights of priority under International Conventions and any related Letters Patent which may hereafter be granted or filed in any country or countries foreign to the United States, all extensions, renewals and reissues thereof.

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Docket No.: CYPHR.002A Page 2 of 4

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Inventors: Phillip Pham and Salil Deshpande

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AND ASSIGNOR DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND ASSIGNOR DOES HEREBY covenant and agree that ASSIGNOR will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Work, and testify in any legal proceeding, assist in the preparation of any other Patent Property relating to the Application and the Work or any improvements made thereto, sign/execute all lawful papers, execute and make all rightful oaths and/or declarations in connection with the Application and the Work including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Work in all countries.

COMBINED DECLARATION & ASSIGNMENT (37 CFR 1.63(e)) Application Data Sheet filed previously or concurrently

Docket No.: CYPHR.002A	Page 3 of 4
Title: SYSTEMS AND METHODS FOR GENOMIC VARIAN	T ANNOTATION
Inventors: Phillip Pham and Salil Deshpande	
Legal Name of inventor: Phillip Pham	
IN TESTIMONY WHEREOF, I hereunto set my hand and : 20	seal this day of,
Signature:	
Signature before a f	Votary is desirable but not required.
STATE OF CALIFORNIA COUNTY OF ss.	
On, before me,	owledged to me that he/she/they executed y his/her/their signature(s) on the instrument
I certify under PENALTY OF PERJURY under the laws of th paragraph is true and correct.	e State of California that the foregoing
WITNESS my hand and official seal. Notary [SEAL]	y Signature
[Starter]	

Application Data Sheet filed previously or concurrently

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Docket No.: CYPHR.002A Page 4 of 4
Title: SYSTEMS AND METHODS FOR GENOMIC VARIANT ANNOTATION
Inventors: Phillip Pham and Salil Deshpande
Legal Name of inventor: Salii Deshpande
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this <u>63</u> day of <u>Septembek</u> ,
20 <u>13</u> . Signature: Llesparch
Signature before a Notary is desirable but not required.
STATE OF CALIFORNIA
COUNTY OF Saw DIEGO Ss.
On Spland 3 2013, before me, Tobal Rould, notary public, personally appeared Salil Deshpande who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(iss), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

[SEAL]

IRENE RANGEL

Commission # 1921490

Notary Public - California

San Diego County

My Comm. Expires Feb 7, 2015

WITNESS my hand and official seal.

15065916 073113

> PATENT REEL: 049163 FRAME: 0393

RECORDED: 05/13/2019