PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5607622

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
AMIRALI TALASAZ	07/02/2014
HELMY ELTOUKHY	07/02/2014
STEFANIE ANN WARD MORTIMER	01/11/2017

RECEIVING PARTY DATA

Name:	GUARDANT HEALTH, INC.
Street Address:	505 PENOBSCOT DRIVE
City:	REDWOOD CITY
State/Country:	CALIFORNIA
Postal Code:	94063

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16389680

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: patents@guardanthealth.com
Correspondent Name: TIMOTHY A. HOTT, ESQ.
Address Line 1: 505 PENOBSCOT DRIVE

Address Line 4: REDWOOD CITY, CALIFORNIA 94063

ATTORNEY DOCKET NUMBER: GH0005US-CON3

NAME OF SUBMITTER: MICHELLE CHAN

SIGNATURE: /mchan/
DATE SIGNED: 07/08/2019

Total Attachments: 3

source=GH0005WO 710.601 signed assign#page1.tif source=GH0005WO 710.601 signed assign#page2.tif source=GH0005US Mortimer signed assign#page1.tif

PATENT 505560825 REEL: 049691 FRAME: 0125

. РА	TENT ASSIGNMENT		Docket Number: 42534-710.601		
WHEREAS, the undersigned:					
1. AmirAli TALASAZ 2181 Camino a Los Cerros Menlo Park, CA 94025	2. Helmy ELTOUKHY 2 Barry Lane Atherton, CA 94027				
(hereinafter "Inventor(s)"),	have invented certain new and	useful improvemen	its in:		
SYSTEMS AND MI	ETHODS TO DETECT RAR	E MUTATIONS AI	ND COPY NUMBER VARIATION		
For which Applicati For which Applicati Patent Cooperation For which Applicati For which the Appl	on No. <u>PCT/US2014/000048</u> w Treaty; on No w	on in the large in the la	United States Patent and Trademark Office; 5, 2014 in the U.S. Receiving Office of the in the Patent Office; and/or t issued on		
in and to said Application(s) heretofore conceived, made referred to as "Inventions"),	CA 94063, (hereinafter "Assign and the inventions disclosed th or discovered, whether jointly and in and to any and all pater reon granted in the United Sta	ee"), is desirous of a serein, and in and to or severally, by said sts, inventor's certifi	ng a place of business at 2686 Middlefield acquiring the entire right, title and interest all embodiments of the inventions, I Inventor(s) (hereinafter collectively cates and other forms of protection s, or under any international convention,		
NOW, THEREFORE, in been received in full from sa	n consideration of good and vaid Assignee:	luable consideratior	acknowledged by said Inventor(s) to have		
1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said Inventions, including the right to claim priority to said Invention(s); (b) in and to all rights to all United States and corresponding non-United States patent applications and Patent(s), including those filed under the Paris Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, or otherwise; (c) in and to any and all applications filed and any and all Patent(s) granted on said Inventions in the United States, in any foreign country, or under any international convention, agreement, protocol, or treaty, including each and every application filed and any and all Patent(s) granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any said Application(s); and (d) in and to each and every reissue, reexamination, supplemental examination or extension of any of said Patent(s).					
2. Said Inventor(s) hereby covenant and agree to cooperate with 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 Inventor(s) shall include prompt production of pertinent facts and documents, giving 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; (b) for prosecuting any applications covering said Invention(s); (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 Patents(s); (e) for interference or other priority proceedings involving					
	Pag	e 1 of 2			

PATENT REEL: 049691 FRAME: 0126

PATENT ASSIGNMENT

Docket Number: 42534-710.601

said Inventions; and (f) for legal proceedings involving said Inventions and any applications therefor and any Patent(s) granted thereon, including without limitation reissues, reexaminations, supplemental examinations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee.

- 3. Said Inventor(s) hereby 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.
- 4. 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.
- 5. Said Inventor(s) hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

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

Signature: AmirAli Talasaz

Date: 10 19

Witnessed By: Signature: Signature:

Signature:
Name: Helmy Eltoukhy

Date: 7/2/7014

Witnessed By:
Signature:

PATENT ASSIGNMENT

Docket Number 42534-710.301

WHEREAS, the undersigned:

1. Mortimer, Stefanie Ann Ward Morgan Hill, CA

(hereinafter "Inventor(s))," have invented certain new and useful improvements in

SYSTEMS AND METHODS TO DETECT RARE MUTATIONS AND COPY NUMBER VARIATION

for which application serial number <u>14/855,301</u> was filed on <u>September 15, 2015</u> in the United States Patent and Trademark Office (hereinafter, "Application(s)"). The term "Application(s)" also includes all patent applications that share or claim priority to or from the above application(s).

WHEREAS, <u>Guardant Health, Inc.</u>, a corporation of the <u>State of Delaware</u>, having a place of business at <u>505 Penobscot Drive</u>, <u>Redwood City</u>, <u>CA 94063</u>, (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said Application(s), and the inventions disclosed therein, and in and to all embodiments of the inventions, heretofore conceived, made or discovered, whether jointly or severally, by said Inventor(s) (hereinafter collectively referred to as "Inventions"), and in and to any and all patents, inventor's certificates and other forms of protection thereon granted in the United States, 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, in consideration of good and valuable consideration acknowledged by said Inventor(s) to have been received in full from said Assignee:

- 1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said Inventions; (b) in and to said Applications, including the right to claim priority to and from said Application(s); (c) in and to each and every application that is a divisional, substitution, 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 outside the United States and corresponding to any of the foregoing; 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).
- Said Inventor(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 Inventor(s) 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; (b) for prosecuting any applications covering said Inventions; (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 or other priority proceedings involving said Inventions; and (f) for legal proceedings involving said Inventions and any applications therefor and any Patent(s) granted thereon, 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.
- 3. 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.
- 4. Said Inventor(s) hereby warrant, represent and covenant that said Inventor(s) have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.
- 5. Said Inventor(s) hereby 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.
- 6. This instrument will be interpreted and construed in accordance with the laws of the State of California, without regard to conflict of law principles. If any provision of this instrument is found to be illegal or unenforceable, the other provisions shall remain effective and enforceable to the greatest extent permitted by law. This instrument may be executed in counterparts, each of which is deemed an original, but all of which together constitute one and the same agreement.

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

Date: * 0//11//2

Stellanie Am Ward Mortime

8743445_1.doc

RECORDED: 07/08/2019

Page 1 of 1

PATENT REEL: 049691 FRAME: 0128