### 505105799 09/21/2018

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5152558

SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYA	NCE:	ASSIGNMENT	
	_		
	ΑΤΑ		
		Name	Execution Date
POPULATION GENETI	CS TECHN	OLOGIES LTD	06/01/2018
RECEIVING PARTY DA	ATA		
Name:	PERSON	IAL GENOME DIAGNOSTICS, IN	С.
Street Address:	2809 BO	STON STREET	
Internal Address:	SUITE 5	03	
City:	BALTIMO	DRE	
State/Country:	MARYLA	ND	
Postal Code:	21224		
	•		
PROPERTY NUMBERS	S Total: 3		
Property Type		Number	
Patent Number:	7	544473	
Patent Number:	8	021842	
Patent Number:	8	445205	
	· · ·		
CORRESPONDENCE I	ΔΑΤΑ		
Fax Number:	· ·	16)742-4366	
		he e-mail address first; if that is if that is unsuccessful, it will be	
Phone:	•	167424343	
Email:		grolz@ssmp.com	
Correspondent Name:		DWARD W. GROLZ	
Address Line 1:		00 GARDEN CITY PLAZA	
Address Line 2: Address Line 4:	-	UITE 300 ARDEN CITY, NEW YORK 11520	
	G	ARDEN CITY, NEW YORK 11530	,
ATTORNEY DOCKET N	UMBER:	36333	
NAME OF SUBMITTER:		EDWARD W. GROLZ	
SIGNATURE:		/Edward W. Grolz/	
DATE SIGNED:		09/21/2018	
Total Attachments: 2			
source=Assignment#pag			
source=Assignment#pag	e2.tif		

### EXHIBIT A

### ASSIGNMENT OF PATENT[S]

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Population Genetics Technologies Ltd, a corporation existing under the laws of England and Wales with company number 05116842 and registered office at Salisbury House, Station Road, Cambridge, CB1 2LA, United Kingdom ("Seller"), hereby sells, assigns, transfers, and conveys to Personal Genome Diagnostics, Inc., a Delaware Corporation with offices at 2809 Boston Street, Suite 503, Baltimore, Maryland 21224 ("Buyer"), pursuant to the Patent Acquisition Agreement dated as of May 31, 2018, by and between Seller and Buyer, all of Seller's right, title, and interest in and to the patents and patent applications set forth on Schedule A-1, attached hereto and incorporated by this reference herein, together with all claims and causes of action with respect to any of the foregoing, including without limitation all rights to and claims for damages, restitution, and injunctive and other legal and equitable relief for past, present, and future infringement, misappropriation, violation, breach, or default, and all other rights, privileges, and protections of any kind whatsoever of Seller accruing under any of the foregoing provided by any applicable law, treaty, or other international convention.

Seller hereby authorizes the Commissioner for Patents in the United States Patent and Trademark Office and the officials of corresponding entities or agencies in any applicable jurisdictions to record and register this Assignment of Patents upon request by Buyer.

IN WITNESS WHEREOF, the undersigned has caused this Assignment of Patents to be executed on this 1 and 1 day of 3 with 2018 by its duly authorized officer.

Population Genetics Technologies, Ltd. BY Mill Unust

Name: Mel Kronick Title: Director

Witness signature: Udward M. Joa demon Name: <u>Episarto M. L'ANDESHA</u>N

Address: 1063 Lideol & Ada. PALOANO, CA, VSA

Witness signature: Mulium & Landesman Name: MIRIAM F. LANDESMAN Address: 1063 LINCOLN AV, PALOALTO, CA 44301, USA

Personal Genome Diagnostics, Inc.,

BV:

Name: Luiceinn STEWERS

Title: \_ CFO

Witness signature: Name: MICHAG Address: 951 Fell St. APt BALFIMER MD 2123]

Witness signature: U.J. 7 Name: Arry T. Har. C Address: <u>411 Cilenward A.e.</u> Glen Bunle, mo 2106

PGDx Ref: CRR0787

### PATENT REEL: 046937 FRAME: 0690

### SCHEDULE A-1 TO EXHIBIT A

### LISTED PATENTS

## Nucleic Acid Analysis Using Sequence Tokens

	REFERENCE#	TVPE	FILED	SERIAL	Keenen	BATENT& CTATIC	C.7. A 'F73C	C.C. 38885 SUPC
UNITED STATES	CGLC-007PRV	NEW	1/23/2006	60/761.577		4. 7 XIN 7 X 7	FYPIRED	CI NIZININGY
EUROPEAN PATENT	CGLC-007EP	DCA	1/22/2007	7762572.1			ABANDONED	
STATES	007(SP) 007(SP)	FCA	1/22/2007	11/656,746	06/09/2009	7,544,473 ISSUED	ISSUED	
WIPO	CGLC-007W0	CEQ	1/22/2007	US2007/001792			NAT PHASE	
UNITED STATES	007CON	CON	4/22/2009	12/428,229	9/20/2011	8,021,842		
UNITED STATES	CGLC- 007CON2	CON	8/16/2011	13/211,113	5/21/2013	8,445,205	ISSUED	
				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Contraction and the second s	A	Provention and the second second	And the second se

# Method for Evaluating Minority Variants in a Sample

COUNTRY REFERENCE#	<b>REFERENCE#</b>	Ę.,	VPE FILED	SERIAL#	ISSUED	PATENT#   STATUS	STATUS	COMMENTS
UNITED STATES CCLC-031PRV	CGLC-031PRV	NEW	12/02/2013	61/910,890			EXPIRED	
WIPO	CGLC-031W0	CEQ	11/26/2014	11/26/2014 1B2014/003082			PUBLISHED	
UNITED STATES	CGLC-031	DCA	5/18/2016	15/037,663			PENDING	
EUROPEAN PATENT CGLC-031EP	CGLC-031EP	DCA	11/26/2014 14841366.9	14841366,9			PENDING	Allowed March 2018

PGDx Ref: CRR0787