

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5152404

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	SECURITY INTEREST	
CONVEYING PARTY DATA		
Name		Execution Date
PERSONAL GENOME DIAGNOSTICS INC.		09/21/2018
RECEIVING PARTY DATA		
Name:	PACIFIC WESTERN BANK	
Street Address:	406 BLACKWELL STREET	
Internal Address:	SUITE 240	
City:	DURHAM	
State/Country:	NORTH CAROLINA	
Postal Code:	27701	
PROPERTY NUMBERS Total: 6		
Property Type	Number	
Patent Number:	7544473	
Application Number:	15811836	
Application Number:	15809613	
Application Number:	15210489	
Application Number:	15070537	
Application Number:	15037663	
CORRESPONDENCE DATA		
Fax Number:	(919)354-1278	
<i>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.</i>		
Phone:	9193143114	
Email:	diligencereview@square1bank.com	
Correspondent Name:	PACIFIC WESTERN BANK	
Address Line 1:	406 BLACKWELL STREET	
Address Line 2:	SUITE 240	
Address Line 4:	DURHAM, NORTH CAROLINA 27701	
NAME OF SUBMITTER:	NICHOLAS NANCE	
SIGNATURE:	/NICHOLAS NANCE-JLT/	
DATE SIGNED:	09/21/2018	

Total Attachments: 8

source=Personal Genome - IPSA - Revised Executed (corrected Exhibit B) (9-21-18)#page1.tif

source=Personal Genome - IPSA - Revised Executed (corrected Exhibit B) (9-21-18)#page2.tif

source=Personal Genome - IPSA - Revised Executed (corrected Exhibit B) (9-21-18)#page3.tif

source=Personal Genome - IPSA - Revised Executed (corrected Exhibit B) (9-21-18)#page4.tif

source=Personal Genome - IPSA - Revised Executed (corrected Exhibit B) (9-21-18)#page5.tif

source=Personal Genome - IPSA - Revised Executed (corrected Exhibit B) (9-21-18)#page6.tif

source=Personal Genome - IPSA - Revised Executed (corrected Exhibit B) (9-21-18)#page7.tif

source=Personal Genome - IPSA - Revised Executed (corrected Exhibit B) (9-21-18)#page8.tif

INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT is entered into as of September 21, 2018 by and between **PACIFIC WESTERN BANK** ("**Bank**") and **PERSONAL GENOME DIAGNOSTICS INC.**, a Delaware corporation ("**Grantor**").

RECITALS

A. Bank has agreed to make certain advances of money and to extend certain financial accommodations to Grantor (the "**Loans**") in the amounts and manner set forth in that certain Loan and Security Agreement by and between Bank and Grantor Loan and Security Agreement dated as of March 7, 2017, as amended by that certain First Amendment to Loan and Security Agreement dated as of September 15, 2017 and as amended by that certain Second Amendment to Loan and Security Agreement dated of even date herewith (as the same may be further amended, modified or supplemented from time to time, the "**Loan Agreement**"; capitalized terms used herein are used as defined in the Loan Agreement).

B. Bank is willing to extend and to continue to extend financial accommodations to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks and Patents to secure the obligations of Grantor under the Loan Agreement.

C. Pursuant to the terms of the Loan Agreement, Grantor has granted to Bank a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement and all other agreements now existing or hereafter arising between Grantor and Bank, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement and under any other agreement now existing or hereafter arising between Bank and Grantor, Grantor grants and pledges to Bank a security interest in all of Grantor's right, title and interest in, to and under its Intellectual Property (including without limitation those Copyrights, Patents and Trademarks listed on Exhibits A, B and C hereto), and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part thereof (collectively, "**Intellectual Property Collateral**").

This security interest is granted in conjunction with the security interest granted to Bank under the Loan Agreement. The rights and remedies of Bank with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents and those which are now or hereafter available to Bank as a matter of law or equity.

Each right, power and remedy of Bank provided for herein or in the Loan Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity, shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Bank of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Bank, of any or all other rights, powers or remedies.

Grantor represents and warrants that Exhibits A, B and C attached hereto set forth any and all intellectual property rights in connection to which Grantor has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address of Grantor:

**PERSONAL GENOME DIAGNOSTICS
INC.**

2809 Boston Street, Suite 503
Baltimore, MD 21224
Attn: William Stevens

By: _____

Name: _____

Title: _____

Doug Ward
Doug Ward
CEO

BANK:

Address of Bank:

PACIFIC WESTERN BANK

406 Blackwell Street, Suite 240
Durham, NC 27701
Attn: Loan Documentation Department

By: _____

Name: _____

Title: _____

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address of Grantor:

**PERSONAL GENOME DIAGNOSTICS
INC.**

2809 Boston Street, Suite 503
Baltimore, MD 21224
Attn: William Stevens

By: _____

Name: _____

Title: _____

BANK:

Address of Bank:

PACIFIC WESTERN BANK

406 Blackwell Street, Suite 240
Durham, NC 27701
Attn: Loan Documentation Department

By: _____

Name: _____

Title: _____

Signature Page to Personal Genome Diagnostics Inc. – Intellectual Property Security Agmt.

EXHIBIT A
COPYRIGHTS

Description	Registration Number	Registration Date
None		

EXHIBIT B**PATENTS**

Description	Registration OR Serial Number	Registration OR Filing Date
Non-Unique Barcodes In A Genotype Assay	15811836	11/14/2017
Systems and Methods For Analyzing Nucleic Acid	15809613	11/10/2017
Neoantigen Analysis	15210489	7/14/2016
Systems And Methods For Analyzing Nucleic Acid	15070537	3/15/2016
Nucleic Acid Analysis Using Sequence Tokens	7544473	6/9/2009
Method for Evaluating Minority Variants In A Sample	15037663	5/18/2016

EXHIBIT C
TRADEMARKS

Description	Registration/ Application Number	Registration/ Application Date
RNA COMPLETE (standard character mark)	5234010	6/27/2017
VARIANTDX (standard character mark)	5182586	4/11/2017
CANCERPRO (standard character mark)	5223953	6/13/2017
PROGENEUS (standard character mark)	5223951	6/13/2017
METDETECT (standard character mark)	5191929	4/25/2017
IMMUNOSELECT (standard character mark)	5196236	5/02/2017
MYPERSONALGENOME (standard character mark)	5078587	11/08/2016
PLASMASELECT (standard character mark)	4947428	4/26/2016
 MYPG (Design + words)	4705039	3/17/2015
 PGD (Design + words)	4697088	3/03/2015
CANCERSELECT (standard character mark)	4705038	3/17/2015
CANCERCOMPLETE (standard character mark)	4705037	3/17/2015
PGDx (Words, Letters)	87816679	3/01/2018
PGDX (standard character mark)	87722252	12/15/2017
PGDX ELIO (standard character mark)	87950371	6/06/2018
PGDx Personal Genome Diagnostics (standard character mark)	87817624	3/02/2018
PGDX ELIO (standard character mark)	87925167	5/17/2018
MUTATORDETECT (standard character mark)	87191295	10/03/2016
TECSEQ	87596101	9/05/2017

Description	Registration/ Application Number	Registration/ Application Date
(standard character mark)		