507785143 03/07/2023

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7832271

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
ARCHERDX, LLC	03/07/2023

RECEIVING PARTY DATA

Name:	U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, AS COLLATERAL AGENT
Street Address:	WEST SIDE FLATS ST. PAUL
Internal Address:	60 LIVINGSTON AVENUE
City:	ST. PAUL
State/Country:	MINNESOTA
Postal Code:	55107

PROPERTY NUMBERS Total: 10

Property Type	Number
Patent Number:	10870847
Patent Number:	10450597
Patent Number:	10704082
Patent Number:	10683531
Patent Number:	11390905
Patent Number:	10947582
Application Number:	17128843
Application Number:	16590878
Application Number:	17746191
Application Number:	63412304

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.

Phone: 212.940.6562

Email: joanne.arnold@katten.com **Correspondent Name:** JOANNE BL ARNOLD

Address Line 1: KATTEN

Address Line 2: 50 ROCKEFELLER PLAZA

PATENT REEL: 062908 FRAME: 0095

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Address Line 4: NEW YORK, NEW YORK 10020-1605						
NAME OF SUBMITTER:		JOANNE BL ARNOLD				
SIGNATURE:		/Joanne BL Arnold/				
DATE SIGNED: 03/07/2023						
		This document serves as an Oath/Declaration (37 CFR 1.63).				
Total Attachments: 6						

source=[executed] Invitae - Patent Security Agreement final 2023 (ArcherDx)#page1.tif source=[executed] Invitae - Patent Security Agreement final 2023 (ArcherDx)#page2.tif source=[executed] Invitae - Patent Security Agreement final 2023 (ArcherDx)#page3.tif source=[executed] Invitae - Patent Security Agreement final 2023 (ArcherDx)#page4.tif source=[executed] Invitae - Patent Security Agreement final 2023 (ArcherDx)#page5.tif source=[executed] Invitae - Patent Security Agreement final 2023 (ArcherDx)#page6.tif

PATENT SECURITY AGREEMENT

THIS PATENT SECURITY AGREEMENT, dated as of March 7, 2023, is made by each of the entities listed on the signature pages hereof (each a "<u>Grantor</u>" and, collectively, the "<u>Grantors</u>"), in favor of U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, as Collateral Agent (in such capacity, together with its successors and permitted assigns, the "<u>Collateral Agent</u>") for the Secured Parties (as defined in the Indenture referred to below) and the other Secured Parties.

WITNESSETH:

WHEREAS, pursuant to the Indenture, dated as of March 7, 2023 (as the same may be amended, restated, supplemented and/or modified from time to time, the "<u>Indenture</u>"), by and among INVITAE CORPORATION (the "<u>Company</u>"), the Subsidiaries of the Company from time to time party thereto, and U.S. Bank Trust Company, National Association, as Trustee and the Collateral Agent, the Company has issued 4.5% Convertible Senior Secured Notes due 2028;

WHEREAS, each Grantor (other than the Company) has agreed, (a) pursuant to the Indenture, to guarantee the Guaranteed Obligations (as defined in the Indenture) of the Company and (b) pursuant to a Security Agreement of even date herewith in favor of Collateral Agent (as such agreement may be amended, restated, supplemented and/or otherwise modified from time to time, the "Security Agreement"), to grant a security interest in the Collateral (as defined in the Security Agreement); and

WHEREAS, the Security Agreement requires the Grantors to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, each Grantor hereby agrees with Collateral Agent as follows:

- 1. <u>Defined Terms</u>. Capitalized terms used herein without definition are used as defined in the Indenture and Security Agreement.
- 2. <u>Grant of Security Interest in Patent Collateral</u>. Each Grantor, as collateral security for the prompt and complete payment and performance when due (whether at stated maturity, by acceleration or otherwise) of the Secured Obligations of such Grantor, hereby mortgages, pledges and hypothecates to Collateral Agent for the benefit of the Secured Parties, and grants to Collateral Agent for the benefit of the Secured Parties a Lien on and security interest in, all of its right, title and interest in, to and under the following Collateral of such Grantor (the "Patent Collateral"):
- (a) all of its Patents providing for the grant by or to such Grantor of any right under any Patent, including, without limitation, those referred to on Schedule 1 hereto;
- (b) all reissues, reexaminations, continuations, continuations-in-part, divisionals, renewals and extensions of the foregoing; and
 - (c) all IP Ancillary Rights.

Notwithstanding anything herein to the contrary, (i) the collateral grant provided in this Section 2 shall not be construed as an assignment of any of the foregoing assets or property and (ii) no Lien or security interest is hereby granted on any Excluded Assets; provided, further, that if and when any assets or property shall

cease to be an Excluded Asset, a Lien on and security interest in such property shall be deemed granted therein.

- 3. <u>Security Agreement</u>. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to Collateral Agent pursuant to the Security Agreement and each Grantor hereby acknowledges and agrees that the rights and remedies of Collateral Agent with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.
- 4. <u>Continuing Obligation</u>. If, before the Secured Obligations shall have been paid in full in cash, Grantor shall obtain rights to any new Patents, the preceding Security Agreement shall automatically apply thereto, and Grantor shall give Collateral Agent prompt written notice thereof.
- 5. <u>Grantor Remains Liable</u>. Each Grantor hereby agrees that, anything herein to the contrary notwithstanding, such Grantor shall assume full and complete responsibility for the prosecution, defense, enforcement or any other necessary or desirable actions in connection with their Patents and IP Ancillary Rights subject to a security interest hereunder.
- 6. <u>Counterparts</u>. This Patent Security Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.
- 7. <u>Governing Law</u>. This Patent Security Agreement and the rights and obligations of the parties hereto shall be governed by, and construed and interpreted in accordance with, the laws of the State of New York.
- 8. <u>Concerning the Collateral Agent</u>. U.S. Bank Trust Company, National Association is entering this Patent Security Agreement not in its individual capacity, but solely in its capacity as the Collateral Agent under the Indenture. In acting hereunder, the Collateral Agent shall be entitled to all of the rights, privileges, indemnities and immunities granted to the Collateral Agent in the Indenture, as if such rights, privileges, indemnities and immunities were set forth herein.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, each Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

> ARCHERDX, LLC as Grantor

By:

Name: Tom Brida

Title: General Counsel and Secretary

-DocuSigned by:

REEL: 062908 FRAME: 0099

ACCEPTED AND AGREED as of the date first above written:

U.S. BANK TRUST COMPANY, NATIONAL ASSOCIATION, as Collateral Agent

Name: Brandon Bonfig

Title: Vice President

REEL: 062908 FRAME: 0100

SCHEDULE I TO PATENT SECURITY AGREEMENT

Patent Registrations

REGISTERED PATENTS

Application Title	Cou ntry	Patent No.	Issue Date	Application No.	Filing Date	Status	Owner
METHODS AND KITS FOR NUCLEIC ACID SAMPLE PREPARATION FOR SEQUENCING	US	10,870,847	22-Dec- 2020	15/945,557	04-Apr- 2018	Granted	ArcherDX, LLC
METHODS OF PREPARING NUCLEIC ACIDS FOR SEQUENCING	US	10,450,597	22-Oct- 2019	14/605,363	26-Jan- 2015	Granted	MGH/ArcherDX, LLC Jointly- Owned
METHODS OF NUCLEIC ACID SAMPLE PREPARATION	US	10,704,082	07-Jul- 2020	15/706,642	15-Sep- 2017	Granted	ArcherDX, LLC
METHODS OF NUCLEIC ACID SAMPLE PREPARATION FOR ANALYSIS OF CELL-FREE DNA	US	10,683,531	16-Jun- 2020	15/706,649	15-Sep- 2017	Granted	ArcherDX, LLC
METHODS OF NUCLEIC ACID SAMPLE PREPARATION FOR ANALYSIS OF DNA	US	11,390,905	19-Jul- 2022	16/804,695	28-Feb- 2020	Granted	ArcherDX, LLC
METHODS OF NUCLEIC ACID SAMPLE PREPARATION FOR IMMUNE REPERTOIRE SEQUENCING	US	10,947,582	16-Mar- 2021	15/802,408	02-Nov- 2017	Granted	ArcherDX, LLC

PATENT APPLICATIONS

Application Title	Country	Application No.	Filing Date	Status	Owner
METHODS AND KITS FOR NUCLEIC ACID SAMPLE PREPARATION FOR SEQUENCING	US	17/128,843	21-Dec- 2020	Published	ArcherDX, LLC
METHODS OF PREPARING NUCLEIC ACIDS FOR SEQUENCING	US	16/590,878	02-Oct-2019	Published	MGH/ArcherDX, LLC Jointly-Owned

METHODS OF NUCLEIC ACID SAMPLE PREPARATION	US	17/746,191	17-May- 2022	Published	ArcherDX, LLC
METHODS FOR DETERMINING A NUCLEOTIDE SEQUENCE	US	63/412,304	30-Sep-2022	Pending	ArcherDX, LLC

RECORDED: 03/07/2023