PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5747299

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
AKOYA BIOSCIENCES, INC.	09/27/2019

RECEIVING PARTY DATA

Name:	INNOVATUS LIFE SCIENCES LENDING FUND I, LP		
Street Address:	777 THIRD AVENUE		
Internal Address:	25TH FLOOR		
City:	NEW YORK		
State/Country:	NEW YORK		
Postal Code:	10017		

PROPERTY NUMBERS Total: 25

Property Type	Number
Patent Number:	10006082
Application Number:	15317019
Application Number:	16240463
Application Number:	62753854
Application Number:	62789935
Application Number:	62801009
Application Number:	62801011
Patent Number:	7555155
Patent Number:	8280140
Patent Number:	8639043
Patent Number:	7953264
Patent Number:	7534991
Patent Number:	7655898
Patent Number:	9541504
Application Number:	14149015
Application Number:	14149020
Application Number:	14795430
Patent Number:	8199999
Patent Number:	8379962
	<u> </u>

PATENT REEL: 050582 FRAME: 0916

505700489

Property Type	Number
Patent Number:	8644580
Patent Number:	8462981
Patent Number:	8666113
Patent Number:	8330087
Patent Number:	10032064
Application Number:	62666697

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: stokesb@gtlaw.com
Correspondent Name: BETHANY STOKES

Address Line 1: GREENBERG TRAURIG, LLP

Address Line 2: ONE INTERNATIONAL PLACE, SUITE 2000

Address Line 4: BOSTON, MASSACHUSETTS 02110

ATTORNEY DOCKET NUMBER:	176634-010800	
NAME OF SUBMITTER:	BETHANY A. STOKES	
SIGNATURE:	/Bethany A. Stokes/	
DATE SIGNED:	10/01/2019	

Total Attachments: 13

source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page1.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page3.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page4.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page5.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page5.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page7.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page8.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page8.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page9.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page10.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page11.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page12.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page12.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page12.tif source=45706472_v 6_Innovatus (Akoya)- IP Security Agreement- LSA- Innovatus (GT)-Sept-2019#page13.tif

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of September 27, 2019, by and between INNOVATUS LIFE SCIENCES LENDING FUND I, LP, as collateral agent for the Lenders (the "Lenders") described in the Loan Agreement (in such capacity, the "Collateral Agent"), and AKOYA BIOSCIENCES, INC., a Delaware corporation ("Grantor").

RECITALS

- A. Lenders have agreed to make certain advances of money and to extend certain financial accommodation to Grantor (the "Loans") in the amounts and manner set forth in that certain Loan and Security Agreement by and between Collateral Agent, the Lenders and Grantor dated the Effective Date (as the same may be amended, modified or supplemented from time to time, the "Loan Agreement"; capitalized terms used herein are used as defined in the Loan Agreement). The Lenders are willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Collateral Agent, for the benefit of the Lenders, a security interest in certain Copyrights, Trademarks, Patents, and mask works to secure the obligations of Grantor under the Loan Agreement.
- B. Pursuant to the terms of the Loan Agreement, Grantor has granted to Collateral Agent, for the benefit of the Lenders, 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, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement, Grantor grants and pledges to Collateral Agent, for the benefit of the Lenders, a security interest in all of Grantor's right, title and interest in, to and under its Intellectual Property Collateral (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.

This security interest is granted in conjunction with the security interest granted to Collateral Agent, for the benefit of the Lenders, under the Loan Agreement. The rights and remedies of Collateral Agent 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 Collateral Agent, for the benefit of the Lenders, as a matter of law or equity. Each right, power and remedy of Collateral Agent 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 Collateral Agent of any one or more of the rights, powers or

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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 Lender, of any or all other rights, powers or remedies.

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IN WITNESS WHEREOF, the partie executed by its officers thereunto duly authorized.	s have caused this Intellectual Property Security Agreement to be duly zed as of the first date written above.
	GRANTOR:
Address of Grantor:	AKOYA BIOSCIENCES, INC.
100 Campus Drive, 6th Floor	
Marlborough, MA 01752	Ву:
Attn: Brian McKelligon	Name: Brian McKettigon Title: Chief Executive Officer
Aut. Drain Workingon	THO. CHOI DACOUBVE CHICA
	COLLATERAL AGENT:
Address of Lender:	INNOVATUS LIFE SCIENCES LENDING FUND I, LP
777 Third Avenue, 25th Floor	
New York, NY 10017	By: Innovatus Life Sciences GP, LP, its general partner

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:	AKOYA BIOSCIENCES, INC.
100 Campus Drive, 6 th Floor Marlborough, MA 01752	
	By: Name:
Attn:	Title
	COLLATERAL AGENT:
Address of Lender:	INNOVATUS LIKE SCIENCES LENDING FUND I, LF
777 Third Avenue, 25th Floor	1 American de la companya del companya de la companya del companya de la companya
New York, NY 10017	By: Innovatus Life Sciences GP, LP, its general
	partner
	By:
	Name: Title:
	Andrew Dym
	Authorized Signatory
	ranonzed Oignotory

EXHIBIT A

Copyrights

<u>Description</u>

<u>Registration Date</u>

<u>Number</u>

None.

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EXHIBIT B

ON SLIDE STAINING BY PRIMER EXTENSION

Earliest Priority Date: June 23, 2014

Country	Serial No.	Subject Matter
U.S.	Pat. No. 10,006,082	A method of cross-linking antibodies to a biological sample
U.S.	App. No. 15/317,019 (Pending)	A method for analyzing a planar sample with a capture agent
U.S.	App. No. 16/240,463 (Pending)	A method for analyzing a planar sample with a capture agent

Patent Applications

Туре	Title	Priority Date	Subject Matter
U.S. Prov.	Flexible Detection Systems	1/8/19	Methods and systems using an antibody conjugated to multiple oligonucleotides
U.S. Prov.	Methods and Kits for Detecting Cells Using Oligonucleotide Conjugated Antibodies	10/31/18	Methods and systems for amplifying a signal from an antibody-conjugated oligonucleotide using RCA
U.S. Prov.	Enzyme Mediated Signal Amplification for a Detection Method	2/4/19	Methods and systems for amplifying a signal from an antibody linked to an enzyme
U.S. Prov.	Enzyme Mediated Signal Amplification for a Detection Method	2/4/19	Methods and systems for amplifying a signal from an antibody linked to an enzyme

Patents Transferred as part of the Asset Purchase Agreement

Number	Countries	Title
7555155	US	Classifying Image Features
8280140	US	Classifying Image Features
8639043	US	Classifying Image Features
7953264	US	Classifying Image Features

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7534991	US	Athermalized Birefringent Filter Apparatus	
7655898	US	Optical Filter Assembly With Selectable Bandwidth	
		And Rejection	
9541504	US	Enhancing Visual Assessment Of Samples	
14149015	US	Multispectral Imaging Systems And Methods	
14149020	US	Whole Slide Multispectral Imaging Systems	
14795430	US	Pure Spectrum Extraction From Biological Samples	
8199999	US	Image Classifier Training	
8379962	US	Image Classifier Training	
8644580	US	Detection Of RNA In Tissue Samples	
8462981	US	Spectral Unmixing For Visualization Of Samples	
8666113	US	Spectral Unmixing For Visualization Of Samples	
8330087	US	US Spectral Imaging System with Dynamic Optical	
		Correction	
10032064	US	Visualization and measurement of cell compartments	
(provisional)	US	Multispectral imaging systems and methods	
62/666,697			

Patents licensed to Akoya under a License and Royalty Agreement dated September 28th, 2018

Exclusively licensed (PKI retains rights for its FOU)
Spectral imaging
Spectral imaging
Spectral imaging of deep tissue
Spectral imaging of biological samples
Spectral imaging of biological samples
Spectral imaging of biological samples
Spectral imaging of biological samples (CN)
Spectral imaging of biological samples2 (DE, GB)
Spectral imaging of biological samples (DE, GB)
Spectral imaging methods
Spectral imaging system
Spectral imaging system
Birefringent filter
Visualizing birefringent structures
Sample imaging and classification
Sample imaging and classification
Multi-spectral imaging
Visualization of stained samples
Non-exclusively licensed
Amplified Array Analysis System
Enhanced catalyzed reporten deposition

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Amplified Array Analysis System
Enhanced catalyzed reporten deposition
Compositions for enhanced catalyzed reporter deposition
4,4-disubstituted cyclohexyl bridged dyes

EXHIBIT C

Trademarks

Mark	Jurisdicti	Filing/	Filing/	Class/Goods and	Owner/Assignee
	on	Registration No.	Registration Date	Services	
THE SPATIAL BIOLOGY COMPANY	US	88/519,760	Filed July 17, 2019 Pending examination	IC 001: Reagent kits for use in cellular imaging comprised of custom conjugated antibodies, oligonucleotides, buffers and solutions, acrylic holders, and plastic containers	Akoya Biosciences, Inc.
				IC 009: Scientific instruments, namely, an automated quantitative imaging apparatus for use in imaging tissue and cellular samples labeled with multiple dyes or stains; Downloadable computer software for use in collecting, storing, analyzing and reporting image data and biological information, and for use in sample tracking and managing projects, laboratory workflow and data, all the foregoing for use in the fields of scientific, biological, clinical, and medical research	
				IC 042: Scientific and technological services, namely, research and design in the fields of cell biology, clinical medical diagnostics and pathology; Providing non-downloadable, cloudbased computer software for use in collecting, storing, analyzing and reporting image data and biological information, and for use in sample tracking and managing projects, laboratory workflow and data, all the	

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Mark	Jurisdicti on	Filing/ Registration No.	Filing/ Registration Date	Class/Goods and Services	Owner/Assignee
				foregoing for use in the fields of scientific, biological, clinical, and medical research	
MOTIF	US	88/328,735	Filed March 6, 2019 Published July 9, 2019 Pending examination	IC 001: Testing kit comprising dyes, buffers, and solutions for use in tissue and cellular imaging for scientific or research use IC 009: Scientific instruments, namely, an automated quantitative imaging apparatus for use in imaging tissue and cellular samples labeled with multiple dyes or stains; Downloadable computer software for use in collecting, storing, analyzing and reporting image data and biological information, and for use in sample tracking and managing projects, laboratory workflow and data, all the foregoing for	Akoya Biosciences, Inc.
				use in the fields of scientific, biological, clinical, and medical research	
AKOYA BIOSCIENC ES	US	5,424,599	March 13, 2018	IC 001: Reagent kits for use in cellular imaging comprised of custom conjugated antibodies, oligonucleotides, buffers and solutions, acrylic holders, and plastic containers. FIRST USE: 20171031. FIRST USE IN COMMERCE: 20171031 IC 009: Scientific instruments, namely, an automated quantitative cell imaging apparatus for use in detecting, counting and measuring cells and cellular biomarkers and that enables a microscope	Akoya Biosciences, Inc.

Mark	Jurisdicti on	Filing/ Registration	Filing/ Registration	Class/Goods and Services	Owner/Assignee
		No.	Date		
				multiplexing imager; a fluidics station in the	
				nature of an apparatus for	
				screening samples,	
				detecting the presence of	
				analytes in samples, and	
				identifying sample type,	
				together with measuring	
				patterns and equipment	
				for making and screening molecular arrays and	
				associated software	
				controller that executes	
				protocols, namely,	
				dispensing, mixing,	
				washing, and captures	
				image data; computer	
				software for use in collecting, storing,	
				analyzing and reporting	
				image data and biological	
				information, and for use	
				in sample tracking and	
				managing projects,	
				laboratory workflow and	
				data, all the foregoing for use in the fields of	
				scientific, biological,	
				clinical, and medical	
				research. FIRST USE:	
				20171020. FIRST USE	
				IN COMMERCE:	
	HC	5 207 527	1 22	20171020	41 D' '
	US	5,387,527	January 23, 2018	IC 009: a robotic station that enables a microscope	Akoya Biosciences, Inc.
\ /			2016	to perform as a super-	IIIC.
" "> /				multiplexing imager, for	
CODE				use in the fields of	
John John Stein, Steen				medical research and	
				biological research.	
				FIRST USE: 20171020.	
				FIRST USE IN COMMERCE: 20171020	
				COMMERCE, 201/1020	
				IC 010: Medical device,	
				namely, a robotic station	
				that enables a microscope	
				to perform as a super-	
				multiplexing imager, for	
				use in the field of clinical medical diagnostics and	
				pathology. FIRST USE:	
				20171020. FIRST USE	

Mark	Jurisdicti on	Filing/ Registration No.	Filing/ Registration Date	Class/Goods and Services	Owner/Assignee
				IN COMMERCE: 20171020	
AKOYA BIOSCIENC ES	US	5,219,834	June 6, 2017	IC 042: Scientific and technological services, namely, research and design in the fields of cell biology, clinical medical diagnostics and pathology. FIRST USE: 20161114. FIRST USE IN COMMERCE: 20170303	Akoya Biosciences, Inc.
AKOY 810 % CIR II CI	US	5,219,833	June 6, 2017	IC 042: Scientific and technological services, namely, research and design in the fields of cell biology, clinical medical diagnostics and pathology. FIRST USE: 20161114. FIRST USE IN COMMERCE: 20170303	Akoya Biosciences, Inc.
OPAL	US	4,765,603	June 30, 2015	IC 001: Assays for research purposes; Reagents for research purposes. FIRST USE: 20140531. FIRST USE IN COMMERCE: 20140531 IC 042: Providing reagent sample testing and diagnostic services for others in the fields of science and research related thereto. FIRST USE: 20150323. FIRST USE IN COMMERCE:	Akoya Biosciences, Inc.
CODEX	US	5,397,034	February 6, 2018	20150323 IC 009: A robotic station that enables a microscope to perform as a supermultiplexing imager, for use in the fields of medical research and biological research. FIRST USE: 20171020. FIRST USE IN COMMERCE: 20171020 IC 010: Medical device,	Akoya Biosciences, Inc.

Mark	Jurisdicti on	Filing/ Registration No.	Filing/ Registration Date	Class/Goods and Services	Owner/Assignee
				namely, a robotic station that enables a microscope to perform as a super- multiplexing imager, for use in the field of clinical medical diagnostics and pathology. FIRST USE: 20171020. FIRST USE IN COMMERCE: 20171020	
VECTRA	US	3,774,489	April 13, 2010	IC 009: Laboratory apparatus and equipment, namely, automated light microscope system consisting primarily of a light microscope, computer hardware and computer software for optical imaging. FIRST USE: 20090225. FIRST USE IN COMMERCE: 20090225	Akoya Biosciences, Inc.
infor	US	3,947,521	April 19, 2011	IC 009: Computer software for research purposes for viewing, measuring, and analyzing digital images, including color images and/or multispectral images, sold alone or as a system with computer hardware. FIRST USE: 20090225. FIRST USE IN COMMERCE: 20090225	Akoya Biosciences, Inc.

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RECORDED: 10/01/2019