

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM515542

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST		
<b>CONVEYING PARTY DATA</b>			
<b>Name</b>	<b>Formerly</b>	<b>Execution Date</b>	<b>Entity Type</b>
BIONANO GENOMICS, INC.		03/22/2019	Corporation: DELAWARE
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	INNOVATUS LIFE SCIENCES LENDING FUND I, LP		
<b>Street Address:</b>	777 THIRD AVENUE		
<b>Internal Address:</b>	25TH FLOOR		
<b>City:</b>	NEW YORK		
<b>State/Country:</b>	NEW YORK		
<b>Postal Code:</b>	10017		
<b>Entity Type:</b>	Limited Partnership: DELAWARE		
<b>PROPERTY NUMBERS Total: 12</b>			
<b>Property Type</b>	<b>Number</b>	<b>Word Mark</b>	
<b>Registration Number:</b>	5439542	BIONANO ACCESS	
<b>Registration Number:</b>	5434448	SAPHYR	
<b>Registration Number:</b>	5434447	SAPHYR CHIP	
<b>Registration Number:</b>	4646747	BIONANO GENOMICS	
<b>Registration Number:</b>	4708378	IRYSSOLVE	
<b>Registration Number:</b>	5076021	BIONANO GENOMICS	
<b>Registration Number:</b>	5045903	BIONANO GENOMICS	
<b>Registration Number:</b>	4502412	IRYSPREP	
<b>Registration Number:</b>	4502411	IRYSCHIP	
<b>Registration Number:</b>	4452118	IRYSVIEW	
<b>Registration Number:</b>	4518478	BIONANO GENOMICS	
<b>Registration Number:</b>	4544066	IRYS	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>	6785532602		
<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>			
<b>Phone:</b>	67855323601		
<b>Email:</b>	jimmarl@gtlaw.com		

CH \$315.00 5439542

**Correspondent Name:** LaShana C. Jimmar, Paralegal  
**Address Line 1:** GREENBERG TRAURIG, LLP  
**Address Line 2:** 3333 PIEDMONT ROAD, NE, SUITE 2500  
**Address Line 4:** Atlanta, GEORGIA 30305

**ATTORNEY DOCKET NUMBER:** 176634.010400

**NAME OF SUBMITTER:** LaShana C. Jimmar

**SIGNATURE:** /LaShana C. Jimmar/

**DATE SIGNED:** 03/22/2019

**Total Attachments: 16**

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## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of March 22, 2019, by and between INNOVATUS LIFE SCIENCES LENDING FUND I, LP, as collateral agent for the Lenders (the "Lenders") described in the Loan Agreement (as defined below) (in such capacity, the "Collateral Agent") and BIONANO GENOMICS, 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 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.

### GOVERNING LAW

THIS AGREEMENT AND ALL DISPUTES AND OTHER MATTERS RELATING HERETO (WHETHER SOUNDING IN CONTRACT LAW, TORT LAW OR OTHERWISE), SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK, WITHOUT REGARD TO CONFLICTS OF LAWS PRINCIPLES (OTHER THAN SECTION 5-1401 OF THE GENERAL OBLIGATIONS LAW).

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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:

BIONANO GENOMICS, INC.

9540 Towne Centre, #100  
San Diego, CA 92121

By:   
Robert Erik Holmlin  
Title: Chief Executive Officer

COLLATERAL AGENT:

Address of Lender:

INNOVATUS LIFE SCIENCES LENDING FUND  
I, LP

By: Innovatus Life Sciences GP, LP, its general  
partner

777 Third Avenue, 25th Floor  
New York, NY 10017

By: \_\_\_\_\_  
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:

BIONANO GENOMICS, INC.

9540 Towne Centre, #100  
San Diego, CA 92121

By: \_\_\_\_\_

Title: \_\_\_\_\_

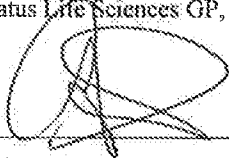
COLLATERAL AGENT:

Address of Lender:

INNOVATUS LIFE SCIENCES LENDING FUND  
I, LP

By: Innovatus Life Sciences GP, LP, its general  
partner

777 Third Avenue, 25th Floor  
New York, NY 10017

By:  \_\_\_\_\_

Title: *Authorized Signatory*

EXHIBIT A

Copyrights

Description

Registration Number

Registration Date

None.

EXHIBIT B

Patents

<u>Grantor</u>	<u>Description</u>	<u>Country</u>	<u>Registration/ App. No.</u>	<u>File Date/Issue Date</u>	<u>Status</u>
Bionano Genomics, Inc.	Methods of Macromolecular Analysis Using Nanochannel Arrays	US	15/062,622 10,000,804	3/7/2016 6/19/2018	Registered Patent
Bionano Genomics, Inc.	Polynucleotide Mapping and Sequencing	US	14/877,818 10,000,803	10/7/2015 6/19/2018	Registered Patent
Bionano Genomics, Inc.	Nanonozzle Device Arrays: Their Preparation and Use for Macromolecular Analysis	US	14/712,816 9,845,238	5/14/2015 12/19/2017	Registered Patent
Bionano Genomics, Inc.	Characterization of Molecules in Nanofluidics	US	14/768,422 9,809,855	8/17/2015 11/7/2017	Registered Patent
Bionano Genomics, Inc.	Embedded Noble Metal Electrodes in Microfluidics	US	14/952,161 9,804,122	11/25/2015 10/31/2017	Registered Patent
Bionano Genomics, Inc.	Nanochannel Arrays and Near-Field Illumination Devices for Polymer Analysis and Related Methods	US	13/498,846 9,725,315	6/13/2012 8/8/2017	Registered Patent
Bionano Genomics, Inc.	Methods and Devices for Single-Molecule Whole Genome Analysis	US	13/765,353 9,536,041	2/12/2013 1/3/2017	Registered Patent
Bionano Genomics, Inc.	Integrated Analysis Devices and Related Fabrication Methods and Analysis Techniques	US	12/996,410 9,533,879	2/16/2011 1/3/2017	Registered Patent
Bionano Genomics, Inc.	Methods of Macromolecular Analysis Using Nanochannel Arrays	US	14/195,474 9,310,376	3/3/2014 4/12/2016	Registered Patent
Bionano Genomics, Inc.	Polynucleotide Mapping and Sequencing	US	13/129,634 9,181,578	6/23/2011 11/10/2015	Registered Patent
Bionano Genomics, Inc.	Nanonozzle Device Arrays: Their Preparation and Use for Macromolecular Analysis	US	12/374,141 9,061,901	8/25/2009 6/23/2015	Registered Patent
Bionano Genomics, Inc.	Methods of Macromolecular Analysis Using Nanochannel Arrays	US	12/057,987 8,722,327	3/28/2008 5/13/2014	Registered Patent
Bionano Genomics, Inc.	Methods and Devices for Single-Molecule Whole Genome Analysis	US	13/001,697 8,628,919	3/22/2011 1/14/2014	Registered Patent
Bionano Genomics, Inc.	Processing of Polynucleotides	US	15/123,457	9/2/2016	Pending
Bionano Genomics, Inc.	Reduction of Bias in Genomic Coverage Measurements	US	15/117,689	8/9/2016	Pending

Bionano Genomics, Inc.	Analysis of Polynucleotides	US	14/897,213	12/9/2015	Pending
Bionano Genomics, Inc.	Methods for Single-Molecule Analysis	US	14/765,537	8/3/2015	Pending
Bionano Genomics, Inc.	Improved Methods of Determining Nucleic Acid Structural Information	US	15/117,699	8/9/2016	Pending
Bionano Genomics, Inc.	Photocleavage Method and Apparatus to Clean Fluidic Devices	US	15/507,416	2/28/2017	Pending
Bionano Genomics, Inc.	Methods and Devices for Single-Molecule Whole Genome Analysis	US	15/381,787	12/16/2016	Pending
Bionano Genomics, Inc.	Integrated Analysis Devices and Related Fabrication Methods and Analysis Techniques	US	15/385,302	12/20/2016	Pending
Bionano Genomics, Inc.	Characterization of Molecules in Nanofluidics	US	15/795,847	10/27/2017	Pending
Bionano Genomics, Inc.	Nanonozzle Device Arrays: Their Preparation and Use for Macromolecular Analysis	US	15/801,081	11/1/2017	Pending
Bionano Genomics, Inc.	Improved Methods of Determining Nucleic Acid Structural Information	US	15/11769	8/9/16	Pending
Bionano Genomics, Inc.	Reduction of bias in genomic coverage measurement	US	EP15708652.1-1403	2/24/15	Pending
Bionano Genomics, Inc.	Labeling of DNA	US	new	6/25/18	Pending
Bionano Genomics, Inc.	Nanonozzle device arrays: their preparation and use for macromolecular analysis	WO	PCT/US07/16408 WO/2008/079169	7/19/07 7/3/08	Converted
Bionano Genomics, Inc.	Nanonozzle device arrays: their preparation and use for macromolecular analysis	AU	2007338862 AU2007338862	7/19/07 5/24/14	Issued
Bionano Genomics, Inc.	Nanonozzle device arrays: their preparation and use for macromolecular analysis	CA	CA2658122 CA2658122	7/19/07 9/2/14	Issued
Bionano Genomics, Inc.	Nanonozzle device arrays: their preparation and use for macromolecular analysis	CN	201310054745.1 CN103203256 ZL201310054745.1	2/20/13	Issued
Bionano Genomics, Inc.	Nanonozzle device arrays: their preparation and use for macromolecular analysis	EP	EP2007872156 EP2049262	7/19/07	Pending
Bionano Genomics, Inc.	Nanonozzle device arrays: their preparation and use for macromolecular analysis	JP	2014-089510 JP2014-158493A JP6030599	10/28/16	Issued



Bionano Genomics, Inc.	Nanonozzle device arrays: their preparation and use for macromolecular analysis	SG	2011-05244-6 SG173,398	7/19/07	Issued
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	WO	PCT/US2008/058671 WO/2008/121828	3/28/08 10/9/08	Converted
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	AU	AU2008232616 AU2008232616	3/28/08 11/20/14	Issued
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	CA	CA2,682,275 CA2,682,275	3/28/08 5/9/17	Issued
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	CA	CA2964611	4/13/17	Pending
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	CN	CN200880017550.7 ZL2008800017550.70	3/28/08 6/5/13	Issued
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	CN	CN201310189106.6	5/21/13	Pending
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	EP	2008-744609.2 EP2136922	3/28/08 12/5/12	Issued
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	GB	2008-744609.2 EP2136922		Issued
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	FR	2008-744609.2 EP2136922		Issued
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	DE	2008-744609.2 EP2136922		Issued
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	SE	2008-744609.2 EP2136922	3/28/08 12/5/12	Issued
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	EP	2013150068.8 EP2604344	1/2/13	Pending
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	HK	10104929.6	3./28/08	Pending
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	JP	2010-501259 JP5,491,378	3./28/08 3/7/14	Issued

Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	JP	2013-258107 JP5860574	2/13/13 12/25/15	Issued
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	KR	10-2009-7022447 KR10-1522741	3./28/08 5/18/15	Issued
Bionano Genomics, Inc.	Methods of macromolecular analysis using nanochannel arrays	SG	2012-02082-2 SG179524	9/23/15	Issued
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	WO	PCT/US2009/049244 WO/2010/002883	6/30/2009 01/07/10	Converted
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	AU	AU2009267086	6/30/09	Issued
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	AU	AU201602242 AU201602242	4/11/2016 4/5/2018	Issued
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	CA	CA2729159	6/30/09	Pending
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	CN	2009-80125335.30	6/30/09	Pending
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	EP	EP20090774334 EP2318547	6/30/09	Granted
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	GB	EP20090774334 EP2318547		Granted
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	DE	EP20090774334 EP2318547		Granted
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	FR	EP20090774334 EP2318547		Granted
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	EP	EP13179160.0 EP2664677	9/2/13 11/20/2013	Granted
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	GB	EP13179160.0 EP2664677		Granted
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	DE	EP13179160.0 EP2664677		Granted
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	FR	EP13179160.0 EP2664677		Granted
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	HK	20-12105208.3	6/30/09	Pending

Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	JP	2011-516813 JP5730762	6/30/2009 4/17/2015	Issued
Bionano Genomics, Inc.	Methods and devices for single molecule whole genomic analysis	JP	2015078505 JP2015163073	6/30/2009 9/11/2015	Issued
Bionano Genomics, Inc.	Integrated nanofluidic analysis devices, fabrication methods and analysis techniques	WO	PCT/US2009/046427 WO/2009/149362	6/5/09 12/10/09	Converted
Bionano Genomics, Inc.	Integrated nanofluidic analysis devices, fabrication methods and analysis techniques	AU	2009256064 AU2009256064	6/5/2009 8/13/2015	Issued
Bionano Genomics, Inc.	Integrated nanofluidic analysis devices, fabrication methods and analysis techniques	AU	2015205826 AU2015205826	7/20/15 11/9/17	Issued
Bionano Genomics, Inc.	Integrated nanofluidic analysis devices, fabrication methods and analysis techniques	CA	2727095	6/5/09	Pending
Bionano Genomics, Inc.	Integrated nanofluidic analysis devices, fabrication methods and analysis techniques	CN	2009-80130482 ZL200980154567.1	6/5/2009 11/26/14	Issued
Bionano Genomics, Inc.	Integrated nanofluidic analysis devices, fabrication methods and analysis techniques	CN	CN201410462892.7 CN104359874 ZL201410462892.7	9/12/14 2/18/15 7/3/18	Issued
Bionano Genomics, Inc.	Integrated nanofluidic analysis devices, fabrication methods and analysis techniques	EP	2009759520	6/5/09	Pending
Bionano Genomics, Inc.	Integrated nanofluidic analysis devices, fabrication methods and analysis techniques	HK	11109208.6	6/5/09	Pending
Bionano Genomics, Inc.	Integrated nanofluidic analysis devices, fabrication methods and analysis techniques	HK	15107980	8/14/15	Pending
Bionano Genomics, Inc.	Integrated nanofluidic analysis devices, fabrication methods and analysis techniques	SG	2010-08920-9 2010-08920-9	6/5/2009 7/31/13	Issued
Bionano Genomics, Inc.	Integrated nanofluidic analysis devices, fabrication methods and analysis techniques	KR	10-2016-7001826 KR10-1767125	1/21/2016 9/4/17	Issued
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	WO	PCT/US2009/064996 WO/2010/059731	11/18/09 5/27/2010	Converted
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	AU	AU2009316628 AU2009316628	11/18/09	Issued
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	CA	CA2744064	11/18/09	Pending
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	CN	2009-80154567.10 ZL20098015456.7	11/18/09 9/24/14	Issued


Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	CN	CN201610248998.6 CN105930689 ZL201410584764	11/18/09 3/30/18	Issued
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	EP	2009-760398.9 EP2370594	11/18/09 1/8/14	Granted
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	GB	2009-760398.9	11/18/09	Granted
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	FR	2009-760398.9	11/18/09	Granted
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	DE	2009-760398.9	11/18/09	Granted
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	HK	12105207.4 HK1166107	11/18/09	Granted
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	HK	15108141.4 HK1207404A	11/18/09 1/29/16	Pending
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	JP	2011537585 JP5846703	11/18/09	Issued
Bionano Genomics, Inc.	Polynucleotide mapping and sequencing	SG	2011-03550-8 SG171,325	11/18/09 11/29/13	Issued
Bionano Genomics, Inc.	Nanoanalyzer Systems and Methods	AU	AU2011316989 AU2011316989	4/18/13	Issued
Bionano Genomics, Inc.	Systems and methods for assessing biomolecule characteristics	CN	CN103443290A CN201180060380.2 ZL201180060380.2	12/11/13 6/14/13 6/8/16	Issued
Bionano Genomics, Inc.	Systems and methods for assessing biomolecule characteristics	CN	CN20160365650.5 CN106048000A	5/27/2016 10/26/16	Pending
Bionano Genomics, Inc.	Systems and methods for assessing biomolecule characteristics	HK	HK14105511.3 HK1192287	6/11/14 9/1/17	Issued
Bionano Genomics, Inc.	Systems and methods for assessing biomolecule characteristics	HK	new	new	Pending
Bionano Genomics, Inc.	Systems and methods for assessing biomolecule characteristics	SG	201302736-2	8/28/13	Pending
Bionano Genomics, Inc.	Nanochannel arrays and near-field illumination devices for polymer analysis and related methods	CN	2010-80043518.3 ZL201080043518.3	9/27/10 9/5/17	Issued
Bionano Genomics, Inc.	Methods for single-molecule analysis	WO	PCT/US2014/014501 WO2014/123822	2/4/14	Expired
Bionano Genomics, Inc.	Methods for single-molecule analysis	AU	AU2014215586	2/4/14	Pending

Bionano Genomics, Inc.	Methods for single-molecule analysis	CA	CA2900054	2/4/14	Pending
Bionano Genomics, Inc.	Methods for single-molecule analysis	CN	201480007595.1 CN105143462	2/4/2014 12/9/15	Pending
Bionano Genomics, Inc.	Methods for single-molecule analysis	HK	HK16105786.9	5/20/16	Pending
Bionano Genomics, Inc.	Methods for single-molecule analysis	EP	EP14748636.9	2/4/14	Pending
Bionano Genomics, Inc.	Methods for single-molecule analysis	JP	JP2015-556985	2/4/14	Pending
Bionano Genomics, Inc.	Characterization of Molecules in Nanofluidics	AU	AU2014219001	2/19/14	Pending
Bionano Genomics, Inc.	Characterization of Molecules in Nanofluidics	CA	CA2901460	2/19/14	Pending
Bionano Genomics, Inc.	Characterization of Molecules in Nanofluidics	EP	EP14753475.4	2/19/14	Pending
Bionano Genomics, Inc.	Characterization of Molecules in Nanofluidics	CN	CN105229168	2/19/14	Pending
Bionano Genomics, Inc.	Characterization of Molecules in Nanofluidics	HK	HK16107465.3	6/27/16	Pending
Bionano Genomics, Inc.	Characterization of Molecules in Nanofluidics	JP	JP2016510590	2/19/14	Allowed
Bionano Genomics, Inc.	System for Nanoanalysis	RU	2013140977 RU142580	8/2/2013 5/27/14	Issued
Bionano Genomics, Inc.	System for Nanoanalysis	WO	PCT/US2014/049442 WO2015017801	8/1/2014 4/23/15	Abandoned
Bionano Genomics, Inc.	Analysis of Polynucleotides	WO	PCT/US14/41568 WO2014/200926	6/9/14 12/18/14	Expired
Bionano Genomics, Inc.	Analysis of Polynucleotides	CN	201480044219.X	6/9/14	Pending
Bionano Genomics, Inc.	Analysis of Polynucleotides	HK	HK16113120.8 HK1225072A	11/15/2016 9/1/17	Pending
Bionano Genomics, Inc.	Analysis of Polynucleotides	JP	2016-519575	6/10/13	Pending

Bionano Genomics, Inc.	Improved Methods of Determining Nucleic Acid Structural Information	CN	CN201580009351.1	8/18/16	Pending
Bionano Genomics, Inc.	Improved Methods of Determining Nucleic Acid Structural Information	HK	HK17103327.9	3/31/17	Pending
Bionano Genomics, Inc.	Photocleavage method and apparatus to clean fluidic devices	WO	PCT/US2015/047688 WO2016036647	8/31/14	Pending
Bionano Genomics, Inc.	Photocleavage method and apparatus to clean fluidic devices	EP	15763711.7	3/29/17	Pending
Bionano Genomics, Inc.	Photocleavage method and apparatus to clean fluidic devices	CN	CN201580055371.2 CN107073472	4/12/17 8/18/17	Pending
Bionano Genomics, Inc.	Photocleavage method and apparatus to clean fluidic devices	JP	JP2017512288	3/2/17	Pending
Bionano Genomics, Inc.	Photocleavage method and apparatus to clean fluidic devices	SG	SG11201702707Q	3/31/17	Pending
Bionano Genomics, Inc.	Reduction of bias in genomic coverage measurement	WO	PCT/US2015/017356 WO2015130696	2/24/15	Expired
Bionano Genomics, Inc.	Reduction of bias in genomic coverage measurement	CN	CN201580016272.3	1/8/15	Pending

EXHIBIT C

US Trademarks

<u>Grantor</u>	<u>Mark</u>	<u>Registration/ App. No.</u>	<u>File Date/Issue Date</u>	<u>Status</u>
Bionano Genomics, Inc.	BIONANO ACCESS	87/375,426 5,439,542	3/17/2017 4/3/2018	Registered
Bionano Genomics, Inc.	SAPHYR	87/314,801 5,434,448	1/26/2017 3/27/2018	Registered
Bionano Genomics, Inc.	SAPHYR CHIP	87/314,787 5,434,447	1/26/2017 3/27/2018	Registered
Bionano Genomics, Inc.	BIONANO GENOMICS	86/975,215 4,646,747	8/28/2013 11/25/2014	Registered
Bionano Genomics, Inc.	IRYSSOLVE	86/400,672 4,708,378	9/19/2014 3/24/2015	Registered
Bionano Genomics, Inc.		86/361,387 5,076,021	8/8/2014 11/8/2016	Registered
Bionano Genomics, Inc.	BIONANO GENOMICS	86/050,497 5,045,903	8/28/2013 9/20/2016	Registered
Bionano Genomics, Inc.	IRYSPREP	85/677,075 4,502,412	7/13/2012 3/25/2014	Registered
Bionano Genomics, Inc.	IRYSCHIP	85/677,063 4,502,411	7/13/2012 3/25/2014	Registered
Bionano Genomics, Inc.	IRYSVIEW	85/677,059 4,452,118	7/13/2012 12/17/2013	Registered
Bionano Genomics, Inc.	BIONANO GENOMICS	85/677,046 4,518,478	7/13/2012 4/22/2014	Registered
Bionano Genomics, Inc.	IRYS	85/677,024 4,544,066	7/13/2012 6/3/2014	Registered

Foreign Trademarks

<u>Grantor</u>	<u>Trademark</u>	<u>Country</u>	<u>Status</u>	<u>Registration No</u>
Bionano Genomics, Inc.	BIONANO GENOMICS	LB	Registered	146661
Bionano Genomics, Inc.	BIONANO GENOMICS	WO	Registered	1147820
Bionano Genomics, Inc.	IRYS	AU	Registered	1150083
Bionano Genomics, Inc.	IRYS	CN	Registered	1150083
Bionano Genomics, Inc.	IRYS	EM	Registered	1150083

Grantor	Trademark	Country	Status	Registration No
Bionano Genomics, Inc.	IRYS	JP	Registered	1150083
Bionano Genomics, Inc.	IRYS	KR	Registered	1150083
Bionano Genomics, Inc.	IRYS	HK	Registered	303501017
Bionano Genomics, Inc.	IRYS	TW	Registered	1766911
Bionano Genomics, Inc.	IRYS	WO	Registered	1150083
Bionano Genomics, Inc.	IRYSVIEW	AU	Registered	1151113
Bionano Genomics, Inc.	IRYSVIEW	CN	Registered	1151113
Bionano Genomics, Inc.	IRYSVIEW	EM	Registered	1151113
Bionano Genomics, Inc.	IRYSVIEW	JP	Registered	1151113
Bionano Genomics, Inc.	IRYSVIEW	KR	Registered	1151113
Bionano Genomics, Inc.	IRYSVIEW	HK	Registered	303501026
Bionano Genomics, Inc.	IRYSVIEW	TW	Registered	1766912
Bionano Genomics, Inc.	IRYSVIEW	WO	Registered	1151113
Bionano Genomics, Inc.	IRYSCHIP	AU	Registered	1150576
Bionano Genomics, Inc.	IRYSCHIP	CN	Registered	1150576
Bionano Genomics, Inc.	IRYSCHIP	EM	Registered	1150576
Bionano Genomics, Inc.	IRYSCHIP	JP	Registered	1150576
Bionano Genomics, Inc.	IRYSCHIP	KR	Registered	1150576
Bionano Genomics, Inc.	IRYSCHIP	US	Registered	4502411
Bionano Genomics, Inc.	IRYSCHIP	HK	Registered	303500991
Bionano Genomics, Inc.	IRYSCHIP	TW	Registered	1782428
Bionano Genomics, Inc.	IRYSCHIP	WO	Registered	1150576
Bionano Genomics, Inc.	IRYSPREP	AU	Registered	1161517
Bionano Genomics, Inc.	IRYSPREP	CN	Registered	1161517
Bionano Genomics, Inc.	IRYSPREP	EM	Registered	1161517
Bionano Genomics, Inc.	IRYSPREP	JP	Registered	1161517

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**TRADEMARK**  
**REEL: 006598 FRAME: 0290**



Grantor	Trademark	Country	Status	Registration No
Bionano Genomics, Inc.	IRYSPREP	KR	Registered	1161517
Bionano Genomics, Inc.	IRYSPREP	HK	Registered	303501035
Bionano Genomics, Inc.	IRYSPREP	TW	Registered	1776408
Bionano Genomics, Inc.	IRYSPREP	WO	Registered	1161517
Bionano Genomics, Inc.	(IRYS in Chinese Characters)	CN	Registered	12190539
Bionano Genomics, Inc.	BIONANO GENOMICS	AU	Registered	1713142
Bionano Genomics, Inc.	BIONANO GENOMICS	HK	Registered	303501044
Bionano Genomics, Inc.	BIONANO GENOMICS	JP	Registered	5924011
Bionano Genomics, Inc.	BIONANO GENOMICS	TW	Pending	
Bionano Genomics, Inc.	BIONANO GENOMICS	WO	Registered	1219073
Bionano Genomics, Inc.	BIONANO GENOMICS (stylized and/or with design)	CN	Registered	1267947
Bionano Genomics, Inc.	BIONANO GENOMICS (stylized and/or with design)	EM	Registered	1267947
Bionano Genomics, Inc.	BIONANO GENOMICS (stylized and/or with design)	US	Registered	5076021
Bionano Genomics, Inc.	BIONANO GENOMICS (stylized and/or with design)	AU	Registered	1717010
Bionano Genomics, Inc.	BIONANO GENOMICS (stylized and/or with design)	HK	Registered	303501053
Bionano Genomics, Inc.	BIONANO GENOMICS (stylized and/or with design)	JP	Registered	5924012
Bionano Genomics, Inc.	BIONANO GENOMICS (stylized and/or with design)	KR	Registered	45-0069219
Bionano Genomics, Inc.	BIONANO GENOMICS (stylized and/or with design)	TW	Pending	
Bionano Genomics, Inc.	BIONANO GENOMICS (stylized and/or with design)	WO	Registered	1267947
Bionano Genomics, Inc.	BIONANO GENOMICS	CN	Registered	14408014
Bionano Genomics, Inc.	IRYSSOLVE	AU	Registered	1253507
Bionano Genomics, Inc.	IRYSSOLVE	CN	Registered	1253507
Bionano Genomics, Inc.	IRYSSOLVE	EM	Registered	1253507
Bionano Genomics, Inc.	IRYSSOLVE	JP	Registered	1253507
Bionano Genomics, Inc.	IRYSSOLVE	KR	Registered	1253507
Bionano Genomics, Inc.	IRYSSOLVE	HK	Registered	303501008

Grantor	Trademark	Country	Status	Registration No
Bionano Genomics, Inc.	IRYSSOLVE	TW	Registered	1766913
Bionano Genomics, Inc.	IRYSSOLVE	WO	Registered	1253507
Bionano Genomics, Inc.	SAPHYR	AU	Registered	1362900
Bionano Genomics, Inc.	SAPHYR	CN	Pending	
Bionano Genomics, Inc.	SAPHYR	EM	Registered	1362900
Bionano Genomics, Inc.	SAPHYR	JP	Registered	1362900
Bionano Genomics, Inc.	SAPHYR	KR	Published	
Bionano Genomics, Inc.	SAPHYR	HK	Registered	304212684
Bionano Genomics, Inc.	SAPHYR	TW	Registered	1916579
Bionano Genomics, Inc.	SAPHYR	WO	Registered	1362900
Bionano Genomics, Inc.	SAPHYR CHIP	AU	Registered	1363411
Bionano Genomics, Inc.	SAPHYR CHIP	CN	Pending	
Bionano Genomics, Inc.	SAPHYR CHIP	EM	Registered	1363411
Bionano Genomics, Inc.	SAPHYR CHIP	JP	Registered	1363411
Bionano Genomics, Inc.	SAPHYR CHIP	KR	Registered	1363411
Bionano Genomics, Inc.	SAPHYR CHIP	US	Registered	5434447
Bionano Genomics, Inc.	SAPHYR CHIP	HK	Registered	304212666
Bionano Genomics, Inc.	SAPHYR CHIP	TW	Registered	1916578
Bionano Genomics, Inc.	SAPHYR CHIP	WO	Registered	1363411
Bionano Genomics, Inc.	SAPHYR	CN	Instructed	

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