505935172 02/25/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5981891

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY DA	АТА			
		Name	Execution Date	
JEFFREY MANDELL			09/23/2019	
SILVIA GRAVINA		09/27/2019		
SERGIO PEISAJOVICH			09/22/2019	
KAITLIN PUGLIESE			09/23/2019	
RECEIVING PARTY DA	ТА			
Name:	ILLUMINA, INC.			
Street Address:	5200 ILLUMINA WAY			
City:	SAN DI	SAN DIEGO		
State/Country:	CALIFO	RNIA		
Postal Code:	92122			
PROPERTY NUMBERS	Total: 1	Number		
PROPERTY NUMBERS Property Type Application Number:		Number 6627035		
Property Type				
Property Type Application Number: CORRESPONDENCE D	1 ATA	6627035		
Property Type Application Number: CORRESPONDENCE D Fax Number:	ATA (6627035 858)202-4545		
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Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	ATA (e sent to provided; ii s ii s s	6627035 858)202-4545 the e-mail address first; if that is unsuccessful, if that is unsuccessful, it will be sent via US M 958-202-4500 luminadocket@illumina.foundationip.com, hare1@illumina.foundationip.com LLUMINA, INC. 5200 ILLUMINA WAY SAN DIEGO, CALIFORNIA 92122 IP-1671-US (ILMN INC)		

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Docket No.: IP-1671-PCT Title: CHARGE-TAGGED NUCLEOTIDES AND METHODS OF USE THEREOF PCT Application No.: PCT/US2019/018565 Filing Date: February 19, 2019 Inventor(s): Jeffrey Mandell, Silvia Gravina, Sergio Peikajovich, Kaitlin Pugliese

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WHEREAS, above identified inventors (collectively "the Assignor/s") have made certain new and useful inventions, discoveries, and improvements (the "inventions"), for which the Assignor/s filed the application/s listed above and now desire/s to convey all right, title, and interest in:

- the inventions,
- the application/s listed above, and any other applications for patent, design, utility model, certificate of invention, trademark, or trade dress, in any country or under any international or regional authority (e.g. WIPO/PCT, EPO, ARIPO, EAPO, OAPI), to the extent some or all of its subject matter is disclosed and entitled to the benefit of priority in the application/s listed above, including provisional, continuation, divisional, continuation-in-part, reissue, and reexamination applications (collectively "the Application/s").
- the benefit of earlier filling date and right to claim priority to the Inventions and Application/s under applicable law and treatles, including the Paris Convention for the Protection of Industrial Property as revised and amended and 35 U.S.C. §§ 119, 120.
- any rights accrued by the publication of the Application/s, such as 35 U.S.C. § 154(d), Art. 67(1) EPC,
- any Letters Patent or Certificates of invention that may be issued or granted from the Application/s, including reissued patents, reexamination certificates, renewals, and any rights resulting from an extension or adjustment of patent term, and
- any rights arising from the Invention under laws and conventions protecting copyright, trademark, trade dress, or other industrial property.

(collectively, "the iP Rights"), and

WHEREAS, ILLUMINA, INC., a Delaware corporation having a place of business at \$200 illumina Way, San Diego, California 92122 USA is desirous of acquiring the entire right, title, and interest for itself, its successors, and its assigns (collectively "the Assignee") in the IP Rights by an instrument in writing, 35 U.S.C. § 261;

NOW, THEREFORE, to all whom it may concern, be it known that, for good and valuable consideration, the receipt and sufficiency of which I/we hereby acknowledge and hereby waive the right to any additional compensation concerning the IP Rights:

PATENT REEL: 051925 FRAME: 0840

Docket No.: IP-1671-PCT Title: CHARGE-TAGGED NUCLEOTIDES AND METHODS OF USE THEREOF PCT Application No.: PCT/US2019/018565 Filing Date: February 19, 2015 Inventor(s): Jeffrey Mandell, Silvia Gravina, Sergio Peisajovich, Kaitlin Pugliese

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I/we warrant and represent to the Assignee that I/we have the full right to convey my/our right, title, and interest in the IP Rights without encumbrance, and that I/we have not made any earlier assignment, license, grant, or mortgage to another, or made any agreement with another, that would affect my/our right, title, and interest in the IP Rights;

By this Assignment and by virtue of any earlier agreements to assign, I/we hereby assign, transfer, convey, and sell my/our entire right, title, and interest in the IP Rights to the Assignee, including any claims or causes of action for damages or other remedies arising out of any earlier violation of the IP Rights, for and to inure to the Assignee's full benefit of the IP Rights as fully as they would have been held by mc/us if this Assignment had not been made;

i/we authorize the Assignee and its legal representatives to:

- (a) insert into this Assignment any supplemental information to make the identification more complete for any of the Application/s or Letters Patent already listed above,
- (b) prosecute the Application/s, file new applications for the invention/s, and do all acts permitted by law to protect and enforce the iP Rights,
- (c) request that Letters Patent and Certificates of Invention be issued and granted to and in the name of the Assignee by the issuing or granting authority, such as the U.S. Commissioner for Patents, 37 C.F.R. § 3.81; and

I/we agree with the Assignee that I/we and my/our legal representatives, heirs, and executors will perform all acts deemed necessary or desirable by the Assignee to permit and assist it to secure the entire right, title, and interest in the IP Rights so that the Assignee may benefit from this Assignment, including:

- (a) communicating to the Assignee all facts known to me/us that relate to the history and extent of my individual contribution to the IP Rights, including the circumstances of the conception of the invention and its development and reduction to practice, and furnishing supporting documents or items in my control,
- (b) assisting in the preparation of the Application/s and their prosecution by the Assignee, 37 C.F.R. § 3.71, and in the enforcement of the IP Rights, including making, executing, and delivering to the Assignee any other necessary documents, such as further application papers, declarations, affidavits, disclaimers, petitions, or assignments, and
- (c) assisting and cooperating in administrative and legal proceedings, including giving written and oral testimony,

PATENT REEL: 051925 FRAME: 0841

Docket No.: IP-1671-PCT Title: CHARGE-TAGGED NUCLEOTIDES AND METHODS OF USE THEREOF PCT Application No.: PCT/US2019/018565 Filing Date: February 19, 2019 Inventor(s): Jeffrey Mandell, Silvia Gravina, Sergio Peisajovich, Kaitlin Pugliese

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so that these will be performed without further consideration, except for reasonable actual expenses to be reimbursed by the Assignee.

I/we further agree with the Assignee that I/we will not perform any future act, execute any subsequent document, or make any subsequent agreement with another person or party that conflicts with this Assignment, that purports to transfer any right, title, or interest in the IP Rights that are the subject of this Assignment, unless agreed to in writing by the Assignee or that prevents the Assignee from receiving the full benefit of the bargain under this Assignment.

If any provision of this Assignment is held invalid or unenforceable, that provision shall be enforced to the maximum extent permissible in order to put into effect the intent of the Assignor/s and the Assignee, and the remainder of this Assignment shall not be affected, but continue in full force and effect.

This document shall be executable by each Assignor in parts, and the Assignment will be effective and recordable for each Assignor as of the date of that Assignor's signature.

Legal Name of Inventor: Jeffrey Mandell IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of ______ 2019.

Legal Name of Inventor: Silvia Gravina IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of ______ 2019.

Signature:

Docket No., IP-1671-PCT Title: CHARGE-TAGGED NUCLEOTIDES AND METHODS OF USE THEREOF PCT Application No., PCT/US2019/018565 Filing Date: February 19, 2019 Inventor(s): Jeffrey Mandell, Silvia Gravina, Sergio Peisajovich, Kaitlin Pugliese

so that these will be performed without further consideration, except for reasonable actual expenses to be reimbursed by the Assignee.

I/we further agree with the Assignee that I/we will not perform any future act, execute any subsequent document, or make any subsequent agreement with another person or party that conflicts with this Assignment, that purports to transfer any right, title, or interest in the IP Rights that are the subject of this Assignment, unless agreed to in writing by the Assignee or that prevents the Assignee from receiving the full benefit of the bargain under this Assignment.

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This document shall be executable by each Assignor in parts, and the Assignment will be effective and recordable for each Assignor as of the date of that Assignor's signature.

Legal Name of Inventor Jeffrey Mandell IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of ______ 2019.

Signature:

Legal Name of Inventor: Silvia Gravina IN TESTIMONY WHEREOF, I hereunto set my hand and seal this <u>27</u> day of <u>SEPTEMBER</u>, 2019.

Silviar Graving Signature:

PATENT REEL: 051925 FRAME: 0843

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Docket No.: IP-1671-PCT Title: CHARGE-TAGGED NUCLEOTIDES AND METHODS OF USE THEREOF PCT Application No.: PCT/US2019/018565 Filing Date: February 19, 2019 Inventor(s): Jeffrey Mandell, Silvia Gravina, Sergio Peisajovich, Kaitlin Pugliese

Legal Name of Inventor: Sergio Peisajovich IN TESTIMONY WHEREOF, I hereunto set my hand a	nd seal this day of 2019.
Signal	ture:
	and the second sec
Legal Name of Inventor: Kaitlin Pugliese IN TESTIMONY WHEREOF, I hereunto set my hand ar	nd seal this day of, 2019.
Signat	Nu6:

PATENT REEL: 051925 FRAME: 0844

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Docket No.: IP-1671-PCT Title: CHARGE-TAGGED NUCLEOTIDES AND METHODS OF USE THEREOF PCT Application No.: PCT/US2019/018565 Filing Date: February 19, 2019 Inventor(s): Jeffrey Mandell, Silvia Gravina, Sergio Peisajovich, Kaitlin Pugliese

Legal Name of Inventor: Sergio Peisajovich IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _____, 2019.

Signature: _____

Legal Name of Inventor: Kaitlin Pugliese IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of <u>2010</u>, 2019.

Signature:

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Docket No.: IP-1671-PCT Title: CHARGE-TAGGED NUCLEOTIDES AND METHODS OF USE THEREOF PCT Application No.: PCT/US2019/018565 Filing Date: February 19, 2019 Inventor(s): Jeffrey Mandell, Silvia Gravina, Sergio Peisajovich, Kaitlin Pugliese

RECEIVED AND HEREBY ACCEPTED BY ILLUMINA, INC., a Corporation

Date: 25 2020

Name: Roland Schwillinski Title: Vice President, Global IP and Litigation

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RECORDED: 02/25/2020