

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5921567

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
TARUN KUMAR KHURANA	08/16/2018
YIR-SHYUAN WU	08/16/2018
XI-JUN CHEN	08/16/2018
FILIZ GORPE-YASAR	08/16/2018
YAN-YOU LIN	08/20/2018
VICTORIA POPIC	10/01/2018
ERICH B. JAEGER	08/27/2018
MOSTAFA RONAGHI	08/29/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ILLUMINA, INC.
<b>Street Address:</b>	5200 ILLUMINA WAY
<b>City:</b>	SAN DIEGO
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	92122
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16626115
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(858)202-4545
<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>	858-202-4500
<b>Email:</b>	illuminadocket@illumina.foundationip.com, share1@illumina.foundationip.com
<b>Correspondent Name:</b>	ILLUMINA, INC.
<b>Address Line 1:</b>	5200 ILLUMINA WAY
<b>Address Line 4:</b>	SAN DIEGO, CALIFORNIA 92122
<b>ATTORNEY DOCKET NUMBER:</b>	IP-1669-US
<b>NAME OF SUBMITTER:</b>	SARA HARE
<b>SIGNATURE:</b>	/Sara Hare/

<b>DATE SIGNED:</b>	01/21/2020
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**Total Attachments: 9**

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## ASSIGNMENT FROM INVENTORS

Docket No.: IP-1669-PCT

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Title: SPATIAL INDEXING OF GENETIC MATERIAL AND LIBRARY PREPARATION USING HYDROGEL BEADS AND FLOW CELLS

Application No.: PCT/US2018/044646

Filing Date: July 31, 2018

Inventor(s): Tarun Kumar Khurana, Yi-Shyuan Wu, Xi-Jun Chen, Filiz Gorpe-Yasar, Yan-You Lin, Victoria Popic, Erich B. Jaeger, Mostafa Ronaghi

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 filing date and right to claim priority to the Inventions and Application/s under applicable law and treaties, 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 5200 Illumina Way, San Diego, CA 92122, United States of America, 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:

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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 me/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

**ASSIGNMENT FROM INVENTORS**

Docket No.: IP-1669-PCT

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Title: SPATIAL INDEXING OF GENETIC MATERIAL AND LIBRARY PREPARATION USING HYDROGEL BEADS AND FLOW CELLS

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- (c) assisting and cooperating in administrative and legal proceedings, including giving written and oral testimony,

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: Tarun Kumar Khurana

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 16<sup>th</sup> day of August, 2018

Signature: Tarun Khurana

Legal Name of Inventor: Yir-Shyuan WU

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 16<sup>th</sup> day of August, 2018

Signature: Yir-Shyuan Wu

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Title: SPATIAL INDEXING OF GENETIC MATERIAL AND LIBRARY PREPARATION USING HYDROGEL BEADS AND FLOW CELLS

Application No.: PCT/U52018/044646

Filing Date: July 31, 2018

Inventor(s): Tarun Kumar Khurana, Yir-Shyuan Wu, Xi-Jun Chen, Filiz Gorpe-Yasar, Yan-You Lin, Victoria Popic, Erich B. Jaeger, Mostafa Ronaghi

Legal Name of Inventor: Xi-Jun Chen

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 16 day of August, 2018.

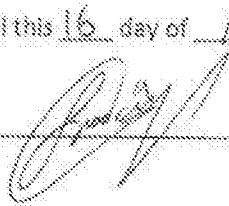
Signature: \_\_\_\_\_



Legal Name of Inventor: Filiz Gorpe-Yasar

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 16 day of August, 2018.

Signature: \_\_\_\_\_



Legal Name of Inventor: Yan-You Lin

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature: \_\_\_\_\_

Legal Name of Inventor: Victoria Popic

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature: \_\_\_\_\_

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Inventor(s): Tarun Kumar Khurana, Yir-Shyuan Wu, Xi-Jun Chen, Filiz Gorpe-Yasar, Yan-You Lin, Victoria Popic, Erich B. Jaeger, Mostafa Ronaghi

Legal Name of inventor: Xi-Jun Chen

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature: \_\_\_\_\_

Legal Name of inventor: Filiz Gorpe-Yasar

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature: \_\_\_\_\_

Legal Name of inventor: Yan-You Lin

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 30 day of August, 2018.

Signature:  \_\_\_\_\_

Legal Name of inventor: Victoria Popic

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature: \_\_\_\_\_

**ASSIGNMENT FROM INVENTORS**

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Inventor(s): Tarun Kumar Khurana, Yir-Shyuan Wu, Xi-Jun Chen, Filiz Gorpe-Yasar, Yan-You Lin, Victoria Popic, Erich B. Jaeger, Mostafa Ronaghi

Legal Name of inventor: **Xi-Jun Chen**

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature: \_\_\_\_\_

Legal Name of inventor: **Filiz Gorpe-Yasar**

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature: \_\_\_\_\_

Legal Name of inventor: **Yan-You Lin**

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature: \_\_\_\_\_

Legal Name of inventor: **Victoria Popic**

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 01 day of October, 2018.

Signature: Victoria Popic



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Title: SPATIAL INDEXING OF GENETIC MATERIAL AND LIBRARY PREPARATION USING HYDROGEL BEADS AND FLOW CELLS

Application No.: PCT/US2018/044646

Filing Date: July 31, 2018

Inventor(s): Tarun Kumar Khurana, Yi-Shyuan Wu, Xi-Jun Chen, Filiz Gorpe-Yasar, Yan-You Lin, Victoria Popic, Erich B. Jaeger, Mostafa Ronaghi

Legal Name of Inventor: Erich B. Jaeger

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 20<sup>th</sup> day of August, 2018.

Signature: Erich B. Jaeger

Legal Name of Inventor: Mostafa Ronaghi

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature: \_\_\_\_\_

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Inventor(s): Tarun Kumar Khurana, Yir-Shyuan Wu, Xi-Jun Chen, Filiz Gorpe-Yasar, Yan-You Lin, Victoria Popic, Erich B. Jaeger, Mostafa Ronaghi

Legal Name of Inventor: Erich B. Jaeger

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature: \_\_\_\_\_

Legal Name of Inventor: Mostafa Ronaghi

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this Aug day of 29, 2018.

Signature:  \_\_\_\_\_

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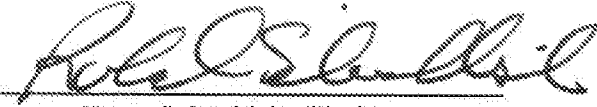
Inventor(s): Tarun Kumar Khurana, Yir-Shyuan Wu, Xi-Jun Chen, Filiz Gorpe-Yasar, Yan-You Lin, Victoria Popic, Erich B. Jaeger, Mostafa Ronaghi

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

Date:

Oct. 30, 2018



Name: Roland Schwillinski

Title: Vice President, Global IP and Litigation