PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3782665

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
M. SHANE BOWEN	11/13/2012
KEVIN L. GUNDERSON	11/13/2012
SHENGRONG LIN	11/13/2012
MARIA CANDELARIA ROGERT BACIGALUPO	11/13/2012
KANDASWAMY VIJAYAN	11/20/2012
YIR-SHYUAN WU	11/13/2012
BALA MURALI VENKATESAN	11/08/2012
JAMES TSAY	11/13/2012
JOHN M. BEIERLE	11/07/2012
LORENZO BERTI	11/13/2012
SANG RYUL PARK	11/13/2012

RECEIVING PARTY DATA

Name:	ILLUMINA, INC.
Street Address:	5200 ILLUMINA WAY
City:	SAN DIEGO
State/Country:	CALIFORNIA
Postal Code:	92122

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14194143

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.

IP-0615A-US

Email: ip@illumina.com

Correspondent Name: ILLUMINA, INC.

Address Line 1: 5200 ILLUMINA WAY

Address Line 4: SAN DIEGO, CALIFORNIA 92122

Address Line 4. OAN DIEGO, OALII OHNA 3212

PATENT REEL: 037969 FRAME: 0842

503736022

ATTORNEY DOCKET NUMBER:

IRJA ZAREMBOK	
/Irja Zarembok/	
03/14/2016	
Total Attachments: 15	
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PATENT REEL: 037969 FRAME: 0843

File Number: IP-0615

ASSIGNMENT OF IP RIGHTS TO ILLUMINA, INC.

WHEREAS, each one of the undersigned:

Name:

M. Shane Bowen

Address:

5200 Illumina Way

San Diego, CA 92122

Name:

Kevin L. Gunderson

Address:

5200 Illumina Way

San Diego, CA 92122

Name:

Shengrong Lin

Address:

25861 Industrial Blvd.

Hayward, CA 94545

Name:

Maria Candelaria Rogert Bacigalupo

Address:

5200 Illumina Way

San Diego, CA 92122

Name:

Kandaswamy Vijayan

Address:

5200 Illumina Way

San Diego, CA 92122

Name:

Yir-Shyuan Wu

Address:

25861 Industrial Blvd.

Hayward, CA 94545

Name:

Bala Murali Venkatesan

Address:

5200 Illumina Way

San Diego, CA 92122

Name:

James Tsay

Address:

5200 Illumina Way

San Diego, CA 92122

Name:

John M. Beierle

Address:

5200 Illumina Way

San Diego, CA 92122

Name:

Lorenzo Berti

Address:

5200 Illumina Way

San Diego, CA 92122

Name:

Sang Ryul Park

Address:

5200 Illumina Way

San Diego, CA 92122

PATENT REEL: 037969 FRAME: 0844

Assignors: Bowen et al. File Number: IP-0615

(collectively "the Assignor/s") have made certain new and useful inventions, discoveries, and improvements (the "Inventions"), for which the Assignor/s filed the following application/s:

File No. IP-0615-US Outside ref. ILMN:0028

Title: MICROARRAY FABRICATION SYSTEM AND METHOD Ser. No. 13/661,524 Filed: October 26, 2012

File No. IP-0615-PCT Outside ref. ILMN:0028PCT Title: MICROARRAY FABRICATION SYSTEM AND METHOD Ser. No. PCT/US2012/062105 Filed: October 26, 2012

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;

Assignors: Bowen et al. File Number: IP-0615

NOW, THEREFORE, to all whom it may concern, be it known that, for good and valuable consideration, and by an obligation that existed before the filing date of the PCT application/s above, the receipt and sufficiency of which I/we hereby acknowledge and hereby waive the right to any additional compensation concerning the IP Rights:

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

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Assignors: Bowen et al. File Number: IP-0615

(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.

For purposes of the PCT application/s listed above, the effective date of this Assignment is October 26, 2012.

Assignors: Bowen et al. File Number: IP-0615

In testimony of this Assignment, I am signing and dating this document below:

Name:

M. Shane Bowen

Signature

Date:

11/13/12

ACKNOWLEDGMENT

State of California Digg(

on November 13, 2012 before me, Rosalyn M. Espejo, Notary Publy

(insert name and title of the officer)

ROSALYN M. ESPEJO COMM. # 1828896 NOTARY PUBLIC-CALIFORNIA

SAN DIEGO COUNTY MY COMB. EXP. JAN. 28, 2013

personally appeared M. Shore Bowen
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)(s*\text{are} subscribed to the within instrument and acknowledged to me that he she/they executed the same in (his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

ignature Thought Many

Page 5 of 15

Assignors: Bowen et al. File Number: IP-0615

In testimony of this Assignment, I am signing and dating this document below:

Name:

Kevin L. Gunderson

Signature

Date:

ACKNOWLEDGMENT

State of California County of SCIO D

- Nou is and

_before me, <u>Rosalyn M. Espap</u>, Notary Hulo) (

(insert name and title of the officer

personally appeared KCVIN L. CIVINCTOVOV)
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) (s) are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

nature Repailings 1.

ROSALYN M. ESPEJO
COMM. # 1828896
ONOTARY PUBLIC-CALIFORNIA
SAN DIEGO COUNTY
MY COMM. EXP. JAN. 28, 2013

Assignors: Bowen et al. File Number: IP-0615

In testimony of this Assignment, I am signing and dating this document below:

Name: Shengrong Lin

Signature

Date: November 13, 2012

ACKN	OW	LED	GM	ENT

State of California County of ____Alameda_

On November 13, 2012 before me. Patricia Nunez-Rabelo, Notary

(insert name and title of the officer)

PATRICIA NUNEZ-RABELO

Alameda County

----- Shengrong Lin ----personally appeared_

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/ber/their-authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(a), or the entity upon behalf of which the person(a) acted, executed the instrument,

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Page 7 of 15

WITNESS my hand and official seal.

Commission # 1897673 Notary Public - California My Comm. Expires Jul 30.

Rev. Feb. 27, 2011

Assignors: Bowen et al. File Number: IP-0615

In testimony of this Assignment, I am signing and dating this document below:

Name:

Maria Candelaria Rogert Bacigalupo

Signature

Date:

ACKNOWLEDGMENT

State of California
County of San Diga?

Nov 13 2012

before me, Rosaly n M. Gspejo,

Notary Public

insert name and title of the officer)

personally appeared MOPCI CONCICITO ROGET BOOLUGE who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is are subscribed to the within instrument and acknowledged to me that he she they executed the same in his heartheir authorized capacity(ies), and that by his their their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

(Seal)

ROSALYN M. ESPEJO
COMM. # 1828896
NOTARY PUBLIC - CALIFORNIA
SAN DIEGO COUNTY
MY COMM. EXP. JAM. 28, 2013

Assignors: Bowen et al. File Number: IP-0615

In testimony of this Assignment, I am signing and dating this document below:

Name:

Kandaswamy Vijavan

Signature

Date:

11/20/2012

ACKNOWLEDGMENT

State of California
County of SCINDIGGO

on Nov. 20 2012

before me, Rosalun M. Espejo, Notary Hub,

(insert name and title of the officer)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is are subscribed to the within instrument and acknowledged to me that he stretched executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Ally (Seal)

ROSALYN M. ESPEJO COMM. # 1828896 NOTARY PUBLIC-CALIFORNIA SAN DIEGO COUNTY MY COMM. EXP. JAB 28, 2013

Assignors: Bowen et al. File Number: IP-0615

In testimony of this Assignment, I am signing and dating this document below:

Name:

Yir-Shyuan Wu

Signature

Wu, Yir-ohyuan

Date:

November 13, 2012

ACKNOWLEDGMENT

State of Califo	rnia	
County of	Alameda	

On November 13, 2012 before me, Patricia Nunez-Rabelo, Notary

(insert name and title of the officer)

personally appeared ______Yir-Shyuan Wu ------

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(a) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Pathicia Nunez-Rabells

PATRICIA MUNEZ-RABELO
Commission # 1897673
Notary Public - Celifornia
Alameda County
My Comm. Expires Jul 30, 201

(Seal)

Assignment of IP Rights to ILLUMINA, INC.
Assignors: Bowen et al.
File Number: IP-0615

In testimony of this Assignment, I am signing and dating this document below:

Name:

Bala Murali Venkatesan

Signature

Date:

ACKNOWLEDGMENT

State of California.
County of San Diego

on November 8, 2012 before me, Resalyn M. Eapero, Notary Public (insert name and title of the officer)

personally appeared
Bala Murali VenkateScon
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s (glave-

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his heritheir authorized capacity(ies), and that by his/her/their signature(s) on the instrument the

WITNESS my hand and official seal.

Signature Repalyoff. Cipj

ROSALYN M. ESPEJO COMM, # 1828898 MOTARY PUBLIC - CALIFORNIA W SAN DIEGO COUNTY MY COMM. EXP. JAR. 28, 2013

Page 11 of 15

Assignors: Bowen et al. File Number: IP-0615

In testimony of this Assignment, I am signing and dating this document below:

Name:

James Tsay

Signature

Date:

ACKNOWLEDGMENT

State of California Diego

on Novamber 13, Rolabetore me, Rosalyn M. Esp

insert name and title of the officer)

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

(Seal)

ROSALYN M. ESPEJO

COMM. # 1828896

NOTARY PUBLIC-CALIFORNIA
SAN DIEGO COUNTY
MY COMM. EXP. JAM. 28, 2013

Assignors: Bowen et al. File Number: IP-0615

In testimony of this Assignment, I am signing and dating this document below:

Name:

John M. Beierle

Signature

Date:

ACKNOWLEDGMENT

State of California
County of SQD D CQD

on November 7, 2012 before me, Rosalyn M. Espejo, Notary Public

(insert name and title of the officer)

personally appeared John M. Beierle

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)(is/are-subscribed to the within instrument and acknowledged to me that be/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

(Seal

ROSALYN M. ESPEJO
COMM. # 1828896
NOTARY PUBLIC-CALIFORNIA
MY COMM. EXP. JAN. 28, 2013

Assignment of IP Rights to ILLUMINA, INC. Assignors: Bowen et al. File Number: IP-0615

In testimony of this Assignment, I am signing and dating this document below:

Name:

Lorenzo Berti

Signature

Loeus M.

Date:

11-13-12

ACKNOWL	EDGMENT
---------	---------

State of California
County of San Diago

on Nov. 13, 2012 before me, Rosalyn M.

Rosalyn M. Espejo Notary Mol

(insert name and title of the officer)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) (stare subscribed to the within instrument and acknowledged to me that he she they executed the same in his her their authorized capacity(ies), and that by his her their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature 10 20 (Seal)

ROSALYN M. ESPEJO
COMM. # 1828896
NOTARY PUBLIC-GALIFORNIA
SAN DIEGO COUNTY
MY COMM. EXP. JAH. 28, 2013

Assignors: Bowen et al. File Number: IP-0615

In testimony of this Assignment, I am signing and dating this document below:

Name:

Sang Ryul Park

Signature

11/13/12

Date:

ACKNOWLEDGMENT

State of California Dregit

No. 13 0010

before me, Rosalyn M. Espejo, Notary Publ

(insert name and title of the officer

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal,

(Seal)

ĵ.,

Page 15 of 15

RECORDED: 03/14/2016

SAN DIEGO COUNTY