506007717 04/09/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6054427

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SEBASTIAN BOHM	02/23/2017
ALEX ARAVANIS	01/19/2017
ALEXANDER HSIAO	02/24/2017
BEHNAM JAVANMARDI	01/20/2017
TARUN KHURANA	01/19/2017
HAI QUANG TRAN	02/24/2017
MAJID AGHABABAZADEH	01/20/2017
M. SHANE BOWEN	01/20/2017
BOYAN BOYANOV	01/20/2017
DALE BUERMANN	02/21/2017

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:	16818953

CORRESPONDENCE DATA

Fax Number: (858)202-4545

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.

Phone: 858-202-4500

Email: illuminadocket@illumina.foundationip.com,

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Correspondent Name: ILLUMINA, INC.

Address Line 1: 5200 ILLUMINA WAY

Address Line 4: SAN DIEGO, CALIFORNIA 92122

ATTORNEY DOCKET NUMBER: IP-1239A-US

NAME OF SUBMITTER:	SARA HARE		
SIGNATURE:	/Sara Hare/		
DATE SIGNED:	04/09/2020		
Total Attachments: 13			
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Docket No.: IP-1239-US Page 1 of 6

Title: Systems and Methods Including a Rotary Valve for At Least One of a Sample Preparation or Sample

Analysis

U.S. Application No.: 15/315,638 Filing Date: December 1, 2016

Inventor(s): Sebastian Bohm, Alex Arayanis, Alexander Hsiao, Behnam Javanmardi, Tarun Khurana, Hai

Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann

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;

Docket No.: IP-1239-US Page 2 of 6

Title: Systems and Methods including a Rotary Valve for At Least One of a Sample Preparation or Sample

Analysis

U.S. Application No.: 15/315,638 Filing Date: December 1, 2016

Inventor(s): Sebastian Bohm, Alex Aravanis, Alexander Hsiao, Behnam Javanmardi, Tarun Khurana, Hai

Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann

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:

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:

- 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.
- 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,

Docket No.: IP-1239-US Page 3 of 5

Title: Systems and Methods Including a Rotary Valve for At Least One of a Sample Preparation or Sample

Analysis

Filing Date:

U.S. Application No.: 15/315,638 December 1, 2016

Inventor(s): Sebastian Bohm, Alex Aravanis, Alexander Hsiao, Behnam Javanmardi, Tarun Khurana, Hai

Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann

assisting in the preparation of the Application/s and their prosecution by the Assignee, (b) 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,

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: Sebastian Bohm

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 23 day of 40

Legal Name of Inventor: Alex Aravanis

ASSIGNMENT FROM INVENTORS	
Docket No.: IP-1239-US Title: Systems and Methods including a Rotary Valve for At Least One of a Sample Prepi	Page 4 of 6
Analysis	materies in Occession
U.S. Application No.: 15/315,638 Filing Date: December 1, 2016	
inventor(s): Sebastian Bohm, Alex Aravanis, Alexander Hsiao, Behnam Javanmardi, Tan Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann	un Khurana, Hai
Legal Name of Inventor: Alex Aravanis	33 mm 3 mm 2 y
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this <u>1</u> day of <u>legaces</u>	y20LZ.
Signature:	
Legal Name of Inventor: Alexander Hsiao IN TESTIMONY WHEREOF, I bereunto set my hand and seal this day of	20 20 28 23 20 28 28 28
Signature:	***************************************
Legal Name of Inventor: Behnam Javanmardi IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of	, 20,
Signature:	
Legal Name of Inventor: Tarun Khurana	
IN TESTIMONY WHEREOF, I bereunto set my hand and seal this day of	, 20
Element to trock	
Signature:	
Legal Name of Inventor: Hai Quang Tran	
IN TESTIMONY WHEREOF, I hercunto set my hand and seal this day of	

Signature: __

ASSIGNMENT FROM INVENTORS	
Docket No.: IP-1239-US Title: Systems and Methods Including a Rotary Valve for At Least One of a Sample Prepara Analysis U.S. Application No.: 15/315,638 Filing Date: December 1, 2016	Page 4 of ! ation or Sample
Inventor(s): Sebastian Bohm, Alex Aravanis, Alexander Hsiao, Behnam Javanmardi, Tarun Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann	Khurana, Hai
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of	, 20
Signature:	
Legal Name of Inventor: Alexander Hsiao IN TESTIMONY WHEREOF, I hereunto set my hand and seal this <u>공부</u> day of <u>Februar</u>	<u>4</u> 20 <u>17</u> .
Signature: Alep Hon	,
Legal Name of Inventor: Behnam Javanmardi IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of	, 20
Signature:	
Legal Name of Inventor: Tarun Khurana IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of	, 20

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this ____ day of ______, 20_____.

Legal Name of Inventor: Majid Aghababazadeh

Legal Name of Inventor: Hai Quang Tran

ASSIGNMENT FROM INVENTORS
Page 4 of Title: Systems and Methods Including a Rotary Valve for At Least One of a Sample Preparation or Sample Analysis U.S. Application No.: 15/315,638 Filing Date: December 1, 2016 Inventor(s): Sebastian Bohm, Alex Aravanis, Alexander Hsiao, Behnam Javanmardi, Tarun Khurana, Hai Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann
Legal Name of Inventor: Alex Aravanis IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of, 20
Signature:
Legal Name of Inventor: Alexander Hsiao IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of
Signature:
Legal Name of Inventor: Behnam Javanmardí IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 20 day of <u>January</u> , 2017
Signature:
egal Name of Inventor: Tarun Khurana N TESTIMONY WHEREOF, I hereunto set my hand and seal this day of, 20
Signature:
Legal Name of Inventor: Hai Quang Tran N TESTIMONY WHEREOF, I hereunto set my hand and seal this day of, 20
Signatura

		ASSIG	NMENT FROM IN	IVENTORS	
Analysis U.S. Applica Filing Date: Inventor(s):	ns and Met tion No.: Decemb Sebastian	hods Including a 15/315,638 er 1, 2016 Bohm, Alex Arav		o, Behnam Javanmaro	Page 4 of Preparation or Sample di, Tarun Khurana, Hai mann
Legal Name IN TESTIMO	of Invento NY WHERE	r: Alex Aravanis OF, I hereunto s	et my hand and seal t	his day of	.20
			Signature:		
		r: Alexander Hsi OF, I hereunto s	et my hand and seal t		, 20
			Signature.		
		r: Behnam Javar OF, I hereunto s		his day of	, 20
			Signature:		
Legal Name IN TESTIMO	of Invento NY WHERE	r: Tarun Khurañ OF, I hereunto s		this 19th day of	January, 20 17
		r: Hai Quang Tr OF, I hereunto s		this day of	20

Signature:

ASSIGNMENT FROM INVENTORS Docket No.: IP-1239-US Page 4 of 5 Title: Systems and Methods Including a Rotary Valve for At Least One of a Sample Preparation or Sample Analysis 15/315,638 U.S. Application No.: Filing Date: December 1, 2016 Inventor(s): Sebastian Bohm, Alex Aravanis, Alexander Hsiao, Behnam Javanmardi, Tarun Khurana, Hai Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _______, 20_____. Signature: Legal Name of Inventor: Alexander Hsiao IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _______, 20_____. Signature: Legal Name of Inventor: Behnam Javanmardi IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _______, 20_____. Signature: Legal Name of Inventor: Tarun Khurana IN TESTIMONY WHEREOF, I hereunto set my hand and seal this _____ day of _______, 20_____. Signature: _____ Legal Name of Inventor: Hai Quang Tran IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 24 day of February 20 17. Signature:

Legal Name of Inventor: Majid Aghababazadeh

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Docket No.: IP-1239-US Title: Systems and Methods Including a Rotary Valve for At Least One of a Sample Preparatio Analysis U.S. Application No.: 15/315,638 Filing Date: December 1, 2016 Inventor(s): Sebastian Bohm, Alex Aravanis, Alexander Hsiao, Behnam Javanmardi, Tarun Kh Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann	
Legal Name of Inventor: Majid Aghababazadeh IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 20 day of January Signature:	, 20_17
Legal Name of Inventor: M. Shane Bowen IN TESTIMONY WHEREOF, I hereunto set my hand and seal thisday of	
Signature:	
Legal Name of Inventor: Boyan Boyanov IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of	, 20
Signature:	
Legal Name of inventor: Dale Buermann IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of	, 20

Signature:

ASSIGNMENT FROM INVENTORS	
Docket No.: IP-1239-US Title: Systems and Methods Including a Rotary Valve for At Least One of a Sample Preparation of Analysis U.S. Application No.: 15/315,638 Filing Date: December 1, 2016 Inventor(s): Sebastian Bohm, Alex Aravanis, Alexander Hsiao, Behnam Javanmardi, Tarun Khur Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann	
Legal Name of Inventor: Majid Aghababazadeh IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of,	20
Signature:	
Legal Name of Inventor: M. Shane Bowen IN TESTIMONY WHEREOF, I hereunto set my hand and seal this <u>lo</u> day of <u>JAVIARY</u> , Signature:	20 <u>17</u> .
Legal Name of Inventor: Boyan Boyanov IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of, Signature:	ž0
Legal Name of Inventor: Dale Buermann IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of,	20
Signature:	

ASSIGNMENT FROM INVENTORS		
Page 5 of 6 Title: Systems and Methods including a Rotary Valve for At Least One of a Sample Preparation or Sample Analysis U.S. Application No.: 15/315,638 Filing Date: December 1, 2016 Inventor(s): Sebastian Bohm, Alex Aravanis, Alexander Hsiao, Behnam Javanmardi, Tarun Khurana, Hai Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann		
Legal Name of Inventor: Majid Aghababazadeh IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of, 20		
Signature:		
Legal Name of Inventor: M. Shane Bowen IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of, 20		
Signature:		
Legal Name of Inventor: Boyan Boyanov IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of figure:		
Legal Name of Inventor: Dale Buermann N TESTIMONY WHEREOF, I hereunto set my hand and seal thisday of, 20		

Signature:

ASSIGNMENT FROM INVENTORS	
Docket No.: IP-1239-US Title: Systems and Methods Including a Rotary Valve for At Least One of a Sample Preparation Analysis U.S. Application No.: 15/315,638 Filing Date: December 1, 2016 Inventor(s): Sebastian Bohm, Alex Aravanis, Alexander Hsiao, Behnam Javanmardi, Tarun Kl Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann	
Legal Name of Inventor: Majid Aghababazadeh IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of	20
Signature:	
Legal Name of Inventor: M. Shane Bowen IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of	
Signature:	
Legal Name of Inventor: Boyan Boyanov IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of	, 20
Signature:	
Legal Name of Inventor: Dale Buermann IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of Signature: Dale Buermann Signature: Dale Buermann	

Docket No.: IP-1239-US

Page 6 of 6

Title: Systems and Methods Including a Rotary Valve for At Least One of a Sample Preparation or Sample

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U.S. Application No.: 15/315,638 Filing Date: December 1, 2016

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Quang Tran, Majid Aghababazadeh, M. Shane Bowen, Boyan Boyanov, Dale Buermann

RECEIVED AND HEREBY ACCEPTED BY ASSIGNEE, ILLUMINA INC.

Date: 25 FW

.2017

Name: Laurie L. Hill, Senior Director

PATENT REEL: 052357 FRAME: 0930

RECORDED: 04/09/2020