PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5007781

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUPHAT WATANASIRI	05/04/2018
SHU WANG	05/04/2018
LILI YU	05/07/2018
CHRISTOPHER QUAN	05/04/2018

RECEIVING PARTY DATA

Name:	ASPEN TECHNOLOGY, INC.	
Street Address:	20 CROSBY DRIVE	
City:	BEDFORD	
State/Country:	MASSACHUSETTS	
Postal Code:	01730	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15961310

CORRESPONDENCE DATA

Fax Number: (978)341-0136

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.

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Email: nadine.kush@hbsr.com **Correspondent Name:** MARY LOU WAKIMURA

Address Line 1: 530 VIRGINIA ROAD, P.O. BOX 9133

Address Line 2: HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

Address Line 4: CONCORD, MASSACHUSETTS 01742

ATTORNEY DOCKET NUMBER:	1086.2060-001
NAME OF SUBMITTER:	NADINE KUSH
SIGNATURE:	/Nadine Kush/
DATE SIGNED:	06/14/2018

Total Attachments: 6

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> **PATENT** REEL: 046092 FRAME: 0818 504961034



PATENT REEL: 046092 FRAME: 0819

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ASSIGNMENT

WHEREAS, we, Suphat Watanasiri, Shu Wang, Lili Yu, Christopher Quan, have invented a certain improvement in Molecular Characterization Method And System described in an application for Patent.

the specification of which is about to be filed in the United States Patent Office (use for mility (37 CFR § 1.53(b)) and design filings only);
is about to be filed in the United States Patent Office as a Provisional Application
the specification of which is United States Application No. 15/961,310, filed April 24, 2018;
the specification of which is a Patent Cooperation Treaty Application, International Application No. [], filed [], which designates the United State of America [and is assigned United States Application No. []];
which was patented under United States Patent No. []

WHEREAS, Aspen Technology, Inc. (hereinsfler "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at 20 Crosby Drive, Bedford, Massachusetts 01730 desires to confirm its interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as descrized in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for any and all related provisional and nonprovisional, international and national phase applications, including any and all substitution, reissue, divisional, continuation, and continuation-in-part applications, and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein; we hereby expressly authorize the filing of an International Patent Application under the

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Patent Cooperation Treaty which corresponds to and claims the priority of the above-identified application;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation, continuation-in-part applications, and all related provisional and nonprovisional, international and national phase applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved:

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

inventor	Ryll WI	Date	5/4/2018
	Suphat Watanasiri		
Witness Signature_	Dain M. Canala		
Print Witness Name	Dara M. Campia		
Witness Signature_	Therbur		
Print Witness Name	Zwy Mou		
Invenor	- Su Vang	Date	
Witness Signature_	<u> </u>		
Print Witness Name			
Witness Signature	Marin m. Campbell		
Print Witness Name	11244 - 22 - 22 - 22 - 22 - 22 - 22 - 22		
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Inventor	A 5-5 \$&	Date	
	Lili Yu		
Witness Signature		***************************************	
Print Witness Name			
Witness Signature			
Print Witness Name			***************************************
Inventor		Date	5/4/6
ing.	Christopiser Quan		
Witness Signature 200	ar 1547 - Camillagaret 4		
Print Witness Name	M. Cample		
Witness Signature	<u> Var Maru</u>		
Print Witness Name	444444		

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#### ASSIGNMENT

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	the specification of which is about to be filed in the United States Patent Office (use for utility (37 CFR § 1.53(b)) and design filings only);
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$\boxtimes$	the specification of which is United States Application No. 15/961,310, filed April 24, 2018;
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AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

Inventor		Date	
988	Suphat Watanasiri	*	# # #
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Dalari William Nimo			
Witness Signature		9 9 9 9 9 2	86 88 88 88 88
Print Witness Name			
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Inventor	Shu Wang	Date	
	Shu Wang		
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Docket No. 1086.2060-001

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Inventor	Lili Yu	Date May 7, 2018
	Lili Yu	**
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Witness Signature	Xian He	
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	Christopher Quan	
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T YELL ALUMINAGE KARITER		
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