PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4379818

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LUMING ZHOU	09/11/2014
CARL T. WITTWER	09/09/2014
PHILIP SETH BERNARD	10/07/2016

RECEIVING PARTY DATA

Name:	UNIVERSITY OF UTAH
Street Address:	615 ARAPEEN DRIVE
Internal Address:	SUITE 310
City:	SALT LAKE CITY
State/Country:	UTAH
Postal Code:	84108

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15491916

CORRESPONDENCE DATA

Fax Number: (801)328-1707

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

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 801-533-9800
Email: sheld@wnlaw.com
Correspondent Name: JOHN C. STRINGHAM
Address Line 1: 60 EAST SOUTH TEMPLE

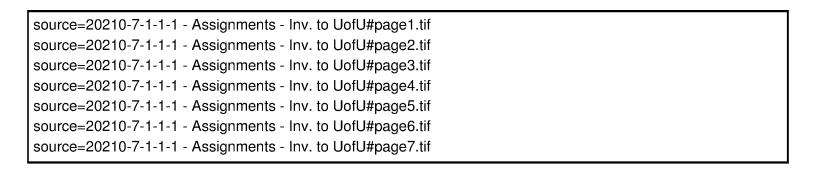
Address Line 2: SUITE 1000

Address Line 4: SALT LAKE CITY, UTAH 84111

ATTORNEY DOCKET NUMBER:	20210.7.1.1.1
NAME OF SUBMITTER:	JOHN. C. STRINGHAM
SIGNATURE:	/John C. Stringham 40,831/
DATE SIGNED:	04/21/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 7

PATENT REEL: 042118 FRAME: 0112



PATENT REEL: 042118 FRAME: 0113

UNITED STATES PATE

Docket No. 6300,20210,7,1,1

COMBINED DECLARATION AND ASSIGNMENT

DECLARATION

TITLE OF APPLICATION: NUCLEIC ACID MELTING ANALYSIS WITH SATURATION DYES

As a below named inventor, I hereby declare that:

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This declaration and assignment is directed to:		
	The attached application;	
	United States Application No filed on; or	
\boxtimes	The application which was filed on August 19, 2014 as U.S. Application No. 14/462,904.	

I hereby authorize the patent attorneys and/or patent agents of Workman Nydegger to insert the above Application No(s), and filing date(s) when known.

The above-identified application was made or authorized to be made by me.

I hereby state that I have reviewed and understand the contents of the above-identified application, including the claim(s). I believe that I am the original inventor or an original joint inventor of one or more claimed inventions in the above-identified application.

I hereby state that I am aware of the duty to disclose all information which is material to patentability as defined in 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

ASSIGNMENT

I, as Assignor, am the original inventor or an original joint inventor of the subject matter disclosed and/or claims in the above-identified application and am desirous to sell, assign and transfer the entire right, title and interest in and to one or more inventions disclosed in the above-identified application, the above-identified application and any and all letters patent which may be granted for the one or more inventions in the United States of America and its territorial possessions and in any and all foreign countries.

Assignee, the University of Utah, an institution of higher education in the State of Utah, having a principal place of business at 615 Arapeen Drive, Suite 310, Salt Lake City, Utah 84108, is desirous of

Docket No. 20210.7.1.1

acquiring the entire right, title and interest in and to the one or more inventions, the above-identified application, and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries.

In exchange for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell, assign and transfer and agree to assign unto the Assignee, the entire right, title and interest in and to the one or more inventions, the above-identified application, any earlier filed provisional applications to which the above-identified application claims priority including any inventions disclosed therein and the right to claim priority thereto, and any and all letters patent which may be granted for the one or more inventions in the United States of America and its territorial possessions and in any and all foreign countries, and any and all divisions, reissues, continuations, continuation-in-parts, and substitutes thereof, including the right to file foreign applications directly in the name of Assignee and to claim priority rights deriving from the above-identified application to which the foreign applications are entitled by virtue of international convention, treaty or otherwise, the one or more inventions, the above-identified application and all letters patent on the one or more inventions to be held and enjoyed by Assignee and its successors and assigns for their use and benefit as fully and entirely as the same would have been held and enjoyed by myself had this assignment, transfer and sale not been made.

I hereby authorize and request the Director of the United States Patent and Trademark Office to issue all letters patent on the inventions to Assignee.

I hereby covenant that no assignment, sale, agreement, or encumbrance has been or will be made or entered into which would conflict with this Assignment.

All claims for damages and all of the remedies arising out of any infringement of the invention or the above-identified United States patent application which may have accrued prior to the date of this assignment or may accrue, including, but not limited to, the right to sue for and collect and retain damages for past infringements of the invention or the above-identified United States patent applications.

l agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on the one or more inventions, for litigation regarding the letters patent, or for the purpose of protecting title to the one or more inventions or letters patent therefor.

Dated this 11 day of September, 2014.

Luming Zhou

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COMBINED DECLARATION AND ASSIGNMENT

DECLARATION

TITLE OF APPLICATION: NUCLEIC ACID MELTING ANALYSIS WITH SATURATION DYES

As a be	below named inventor, I hereby declare that:	
This declaration and assignment is directed to:		
	The attached application;	
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I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

ASSIGNMENT

I, as Assignor, am the original inventor or an original joint inventor of the subject matter disclosed and/or claims in the above-identified application and am desirous to sell, assign and transfer the entire right, title and interest in and to one or more inventions disclosed in the above-identified application, the above-identified application and any and all letters patent which may be granted for the one or more inventions in the United States of America and its territorial possessions and in any and all foreign countries.

Assignce, the University of Utah, an institution of higher education in the State of Utah, having a principal place of business at 615 Arapeen Drive, Suite 310, Salt Lake City, Utah 84108, is desirous of

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PATENT REEL: 042118 FRAME: 0116 acquiring the entire right, title and interest in and to the one or more inventions, the above-identified application, and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries.

In exchange for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell, assign and transfer and agree to assign unto the Assignee, the entire right, title and interest in and to the one or more inventions, the above-identified application, any earlier filed provisional applications to which the above-identified application claims priority including any inventions disclosed therein and the right to claim priority thereto, and any and all letters patent which may be granted for the one or more inventions in the United States of America and its territorial possessions and in any and all foreign countries, and any and all divisions, reissues, continuations, continuation-in-parts, and substitutes thereof, including the right to file foreign applications directly in the name of Assignee and to claim priority rights deriving from the above-identified application to which the foreign applications are entitled by virtue of international convention, treaty or otherwise, the one or more inventions, the above-identified application and all letters patent on the one or more inventions to be held and enjoyed by Assignee and its successors and assigns for their use and benefit as fully and entirely as the same would have been held and enjoyed by myself had this assignment, transfer and sale not been made.

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I agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on the one or more inventions, for litigation regarding the letters patent, or for the purpose of protecting title to the one or more inventions or letters patent therefor.

Dated this 1th day of September, 2014.

Carl T. Wittwer

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COMBINED DECLARATION AND ASSIGNMENT

DECLARATION

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TITLE OF	SAPPLICATION: NUCLEIC ACID MELTING ANALYSIS WITH SATURATION DYES
As	a below named inventor, I hereby declare that:
Th	is declaration and assignment is directed to:
	The attached application;
	United States Application No filed on; or
\boxtimes	The application which was filed on August 19, 2014 as U.S. Application No. 14/462,904.
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Th	e above-identified application was made or authorized to be made by me.
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ASSIGNMENT

I, as Assignor, am the original inventor or an original joint inventor of the subject matter disclosed and/or claims in the above-identified application and am desirous to sell, assign and transfer the entire right, title and interest in and to one or more inventions disclosed in the above-identified application, the above-identified application and any and all letters patent which may be granted for the one or more inventions in the United States of America and its territorial possessions and in any and all foreign countries.

The Assignee, the University of Utah, an institution of higher education of the State of Utah, having a place of business at 615 Arapeen Drive, Suite 310, Salt Lake City, Utah 84108, is desirous of acquiring the entire right, title and interest in and to the one or more inventions, the above-identified application, and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries.

In exchange for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell, assign and transfer and agree to assign unto the Assignee the entire right, title and interest in and to the one or more inventions, the above-identified application, any earlier filed provisional applications to which the above-identified application claims priority including any inventions disclosed therein and the right to claim priority thereto, and any and all letters patent which may be granted for the one or more inventions in the United States of America and its territorial possessions and in any and all foreign countries, and any and all divisions, reissues, continuations, continuation-in-parts, and substitutes thereof, including the right to file foreign applications directly in the name of Assignee and to claim priority rights deriving from the above-identified application to which the foreign applications are entitled by virtue of international convention, treaty or otherwise, the one or more inventions, the above-identified application and all letters patent on the one or more inventions to be held and enjoyed by Assignee and its successors and assigns for their use and benefit as fully and entirely as the same would have been held and enjoyed by myself had this assignment, transfer and sale not been made.

I further hereby sell, assign and transfer and agree to assign unto the Assignee, all claims for damages and all of the remedies arising out of any infringement of the invention or the above-identified United States patent application which may have accrued prior to the date of this assignment or may accrue, including, but not limited to, the right to sue for and collect and retain damages for past infringements of the invention or the above-identified United States patent applications.

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I hereby agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on the one or more inventions, for litigation regarding the letters patent, or for the purpose of protecting title to the one or more inventions or letters patent therefor.

Dated this __ day of October . 2016.

COUNTY OF Selt lake)

2016, before Remand known to me to be the person described and who signed the foregoing Assignment in my presence and acknowledged under oath before me that he has read the same and knows the contents thereof and that he executed the same as his free act and deed and for the purposes set forth therein.

Notary Public ESLE J. SMITH Conversation #807991 Menh 24, 2020 State of Utah

My Commission Expires: March 24, 2020 Buch Jollada, Utch

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