#### 503286532 04/30/2015

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3333150

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
CHAD A. MIRKIN	02/21/2013
KEITH A. BROWN	02/19/2013
WOOYOUNG SHIM	02/28/2013
DANIEL J. EICHELSDOERFER	02/19/2013
BORIS RASIN	02/28/2013
XING LIAO	02/19/2013
GUOLIANG LIU	02/19/2013
ABRIN L. SCHMUCKER	02/19/2013
SHU HE	02/20/2013

### **RECEIVING PARTY DATA**

Name:	NORTHWESTERN UNIVERSITY	
Street Address:	633 CLARK STREET	
City:	EVANSTON	
State/Country:	ILLINOIS	
Postal Code:	60208	

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14439252

### **CORRESPONDENCE DATA**

Fax Number: (312)474-0448

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ATTORNEY DOCKET NUMBER:	30938/2012-090
NAME OF SUBMITTER:	SHELLEY DANEK

PAIENI REEL: 035532 FRAME: 0914 503286532

SIGNATURE:	/Shelley Danek/
DATE SIGNED:	04/30/2015
Total Attachments: 9	
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PATENT REEL: 035532 FRAME: 0915

#### <u>ASSIGNMENT</u>

WHEREAS, WE, CHAD A. MIRKIN, KEITH A. BROWN, WOOYOUNG SHIM, DANIEL J. EICHELSDOERFER, BORIS RASIN, XING LIAO, GUOLIANG LIU, ABRIN L. SCHMUCKER, and SHU HE (hereinafter collectively referred to as ("ASSIGNORS") have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Patent Application: Heat Actuated and Projected Lithography Systems and Methods Application Filing Date: October 29, 2012 Serial No.: 61/719,918

WHEREAS, Northwestern University, an Illinois not-for-profit corporation, having a place of business at 633 Clark Street, Evanston, Illinois 60208, hereinafter referred to as "ASSIGNEE," is desirous of acquiring the entire right, title and interest in said invention and application and in any Letters Patent which may be granted on the same;

NOW THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged, ASSIGNORS have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said ASSIGNEE, and ASSIGNEE's successors and assigns, all right, title and interest in and to said invention, said application for United States Letters Patent, and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world, including any divisions, renewals, continuations in whole or in part, substitutions, conversions, reissues, or prolongations or extensions thereof, said interest to be held and enjoyed by said ASSIGNEE as fully and exclusively as it would have been held and enjoyed by said ASSIGNORS had this assignment and transfer not been made, to the full extent and term of any Letters Patent.

ASSIGNORS further agree that ASSIGNORS will, without charge to said ASSIGNEE, but at ASSIGNEE's expense, cooperate with ASSIGNEE in the prosecution of said application and/or applications; execute, verify, acknowledge, and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof; and perform such other acts as ASSIGNEE lawfully may request, to obtain or maintain Letters Patent for said invention and improvement in any and all countries, and to vest title thereto in said ASSIGNEE, or ASSIGNEE's successors and assigns.

IN TESTIMONY WHEREOF, ASSIGNORS have hereunto signed ASSIGNORS' names to this Assignment on the date indicated below.

2-21-13 DATE

On this <u>2/57</u> day of <u>44444</u>, 2013, before me, a Notary Public in and for the County and State aforesaid, appeared, to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he or she executed said instrument as his or her free and voluntary act and for the uses and purposes therein expressed.

Page 1 of 9

Title of Patent Application: Heat Actuated and Projected Lithography Systems and Methods

Application Filing Date: October 29, 2012

Serial No.: 61/719,918

KEITH A PROWN

State of Vellus

County of Cook

My Commission Expires:

[NOTARY SEAL]

"OFFICIAL SEAL"
BEVERLY RUTH MILLIGAN
NOTARY PUBLIC, STATE OF ILLINGIS
MY COMMISSION EXPIRES 5/21/2013

Title of Patent Application: Heat Actuated and Projected Lithography Systems and Methods

Application Filing Date: October 29, 2012 Serial No.: 61/719,918

WOOYOUNG SHIM

State of Massachaetts

County of Middleson

State of Massachaetts

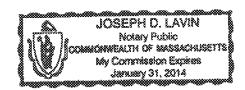
State of Massachaetts

On this ZETh day of February, 2013, before me, a Notary Public in and for the County and State aforesaid, appeared, to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he or she executed said instrument as his or her free and voluntary act and for the uses and purposes therein expressed.

NOTARY PUBLIC

[NOTARY SEAL]

My Commission Expires: 1/3//14



Title of Patent Application: Heat Actuated and Projected Lithography Systems and Methods

Application Filing Date: October 29, 2012

Serial No.: 61/719,918

DANIEL J. EICHELSDOERFER

State of \_

County of \_\_\_\_

[NOTARY SEAL]

My Commission Expires:

POPPICIAL STAL

\$ PEVERIN RITH ANDUGAN \$ NOTAE PUBLIC STATE OF ILLINGS \$ 100 TEMBLE ON EXPERTS SAILAND

Title of Patent Application: Heat Actuated and Projected Lithography Systems and Methods

Application Filing Date: October 29, 2012

Serial No.: 61/719,918

5/8/8013 DATE

On this \_\_\_\_\_\_\_day of \_\_\_\_\_\_\_\_, 2013, before me, a Notary Public in and for the County and State aforesaid, appeared, to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he or she executed said instrument as his gr her free and voluntary act and for the uses and purposes therein expressed.

[NOTARY SEAL]

My Commission Expires: 2-20-2016

JOSEPH R. ENNIS NOTARY PUBLIC STATE OF MARYLAND My Commission Expires February 20, 2016

Title of Patent Application: Heat Actuated and Projected Lithography Systems and Methods

Application Filing Date: October 29, 2012

Serial No.: 61/719,918

XÍNG LIAO DATE

02/19/2013

State of William County of Cook ss.

REVERTY FUTH MILLIGAN NOTARY PUBLIC, STATE OF ILLING MY COMMISSION EXPIPES SIZES

NOTARY PUBLIC

[NOTARY SEAL]

My Commission Expires:

Page 6 of 9

Title of Patent Application: Heat Actuated and Projected Lithography Systems and Methods

Application Filing Date: October 29, 2012

Serial No.: 61/719,918

GUOLIANG LIU

DATE

State of

County of \_

SS.

[NOTARY SEAL]

TO PETCHAL SEAR SEVERLY PLOTA MILLIGAN NOTARY PUBLIC, STATE OF ILLISODS NY COMMISSION ENTERS DISCRESS My Commission Expires:

Attorney Docket No. 30938/2012-095P NU Reference No. 2012-095-01

**Assignment for Execution** 

Title of Patent Application: Heat Actuated and Projected Lithography Systems and Methods

Application Filing Date: October 29, 2012

Serial No.: 61/719,918

ABRIN L. SCHMUCKER

State of Ollians

BEVERLY RUTH MILLIGAN NOTARY PUBLIC, STATE OF ELINGIS BY COMMISSION EXPIRES NO 1/2010

County of Cook

[NOTARY SEAL]

My Commission Expires:



Assignment for Execution	d Designated Lithermonter Systems and Mathede
Title of Patent Application: Heat Actuated an Application Filing Date: October 29, 2012	d Projected Lithography Systems and Methods Serial No.: 61/719,918
INVENTOR PRINTED NAME: SHU HE	_{Signature)
DATE OF EXECUTION: $02/20/3$	
FIRST WITNESS:	
	(Signature)
Printed Name: Kan Li	
Witness Date: 02/20/20/3	_
Home Address:	
Room 695, Building 9	-
Yanggiangshilv, Oilmmen, Jangning Majing, Jangu, RP China	- -
SECOND WITNESS:	
真生	(Signature)
Printed Name: Kun Liao	
Witness Date: 02 -/20/2013	
Home Address:	
Rm 1603. Unit 3. Building I	-
99 Dinghnaimen St, Culon distri	et,
Namijing Jiangen, China	-

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