506064495 05/18/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6111210

SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT			
NATURE OF CONVEYA	NCE:	ASSIGNMENT	ASSIGNMENT			
CONVEYING PARTY D	ΑΤΑ					
		Name	Execution Date			
MARK SALY			02/16/2017			
BHASKAR JYOTI BHU	YAN		02/16/2017			
JEFFREY W. ANTHIS			02/16/2017			
FENG Q. LIU	02/17/2017					
DAVID THOMPSON			05/14/2020			
RECEIVING PARTY DA						
Name:		ED MATERIALS, INC.				
Street Address:	3050 E	3050 BOWERS AVENUE				
City:	SANTA	SANTA CLARA				
State/Country:	CALIF	CALIFORNIA				
Postal Code:	95054					
PROPERTY NUMBERS Total: 1 Property Type		Number				
Application Number:		15413956				
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Application Number: CORRESPONDENCE I Fax Number: Correspondence will b using a fax number, if Email: Correspondent Name: Address Line 1: Address Line 2:	e sent to provide	15413956 o the e-mail address first; if that is unsucced; if that is unsuccessful, it will be sent via the se				

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors

NAMES OF TAXABLE PARTY OF TAXAB	***************************************
1)	Mark Saly 111 Saratoga Avenue Apt. 2314 Santa Clara, CA, 95051 United States of America
2)	Bhaskar Jyoti Bhuyan 1634 Willow Lake Lane San Jose, CA 95131 United States of America
3)	Jeffrey W. Anthis 3115 Franela Drive San Jose, CA, 95124 United States of America

4)	Feng Q. Liu 4729 Lago Vista Cir. San Jose, CA, 95129 United States of America
5)	David Thompson 2193 Bentley Ridge Drive San Jose, CA, 95138 United States of America

(hereinafter referred to as Assignors), have invented a certain invention entitled:

"Acetylide-Based Silicon Precursors And Their Use As ALD/CVD Precursors"

for which application for Letters Patent in the United States was filed on January 24, 2017,

under Serial No. 15413956, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, CA, 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as the Application), and the invention disclosed therein (hereinafter referred to as the Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as the Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of

PATENT REEL: 052689 FRAME: 0332

Attorney Docket No. 023678USA

any of said Patents.

2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assigners in providing such cooperation shall be paid for by said Assignee.

3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.

4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1) _____ 2017 _____ (INVENTOR) Mark Saly

2017

3) <u>2-/6</u>, 2017

2/17/ 2017

(INVENTOR) Jeffrey W. Anthis

(INVENTOR) Bhaskar Jyoti Bhuyan

(INVENTOR) Feng Q. Liu

5) _____, 2017

(INVENTOR) David Thompson

PATENT REEL: 052689 FRAME: 0333

Attorney Docket No. 023678USA

any of said Patents.

2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignee.

3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.

4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)		_, 2020	(INVENTOR) Mark Saly
2)		, 2020	(INVENTOR) Bhaskar Jyoti Bhuyan
3)		, 2020	(INVENTOR) Jeffrey W. Anthis
4)		, 2020	(INVENTOR) Feng Q. Liu
5)	5/14/2020	, 2020	///////