502107547 10/25/2012

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Eric A. Englhardt	08/30/2012
Richard Giljum	08/30/2012
Jeffrey C. Hudgens	08/30/2012
lgor G. Kogan	08/30/2012
Michael Robert Rice	09/04/2012
Sushant S. Koshti	09/04/2012

RECEIVING PARTY DATA

Name:	Applied Materials, Inc.
Street Address:	3050 Bowers Avenue
City:	Santa Clara
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13571080

CORRESPONDENCE DATA

9145792201 Fax Number:

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ATTORNEY DOCKET NUMBER:	16625
NAME OF SUBMITTER:	Brian M. Dugan

Total Attachments: 3 source=108107#page1.tif source=108107#page2.tif source=108107#page3.tif

> **PATENT** REEL: 029193 FRAME: 0233

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Attorney Docket No: 16625/FEG/SYNX/CROCKER S

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

- Eric A. Englhardt
 4168 Wallis Court
 Palo Alto CA 94306
- Richard Giljum
 2855 Crystal Lane
 Brentwood CA 94513
- Jeffrey C. Hudgens
 21 Porter Street
 San Francisco, CA 94110
- Igor G. Kogan
 7144 Geary Blvd.
 San Francisco, CA 94121
- Michael Robert Rice
 1025 Via DI Salerno
 Pleasanton CA 94566
- Sushant S. Koshti
 1042 Lyon Terrace
 Sunnyvale, CA 94089

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

ROBOT SYSTEMS, APPARATUS, AND METHODS ADAPTED TO PROCESS SUBSTRATES IN MULTIPLE TIERS

for which application for Letters Patent in the United States was filed August 9, 2012 under Serial No. 13/571,080; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 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

PATENT REEL: 029193 FRAME: 0234 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 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 therefor 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 Assignors 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 has 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.

Dated: \(\frac{30}{20} \) \(\frac{20}{20} \)

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Dated: _	8/30/2012	Igor G. Kogan
Dated:	9/4/2012	Michael Robert Rice
Dated:	09/04/12	S Katu Sushant S. Koshti