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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYAN	ICE:	ASSIGNMENT		
CONVEYING PARTY DA	ATA			
		Name Execution Date		
KARUPPASAMY MUTH	JKAMAT	MATCHY 06/17/2019		
RAJKUMAR THANU	07/29/20			
ERAN WEISS		07/19/2019		
JEFFREY C. HUDGENS		07/26/2019		
CHANDRAKANT SAPKA				
RECEIVING PARTY DA	ГА			
Name:	APPLIE	ED MATERIALS, INC.		
Street Address:	3050 BOWERS AVENUE			
City:	SANTA	SANTA CLARA		
State/Country:	CALIFO	CALIFORNIA		
Postal Code:	95054			
Property Type		Number		
горену туре		16434886		
Application Number:		10434000		
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CORRESPONDENCE D Fax Number: <i>Correspondence will be using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NU	ATA e sent to provideo	o the e-mail address first; if that is u l; if that is unsuccessful, it will be s 973-597-2500 smacdonald@lowenstein.com LOWENSTEIN SANDLER LLP PATENT DOCKET ADMINISTRATOF ONE LOWENSTEIN DRIVE ROSELAND, NEW JERSEY 07068 44015312US01(36119L0565-1 NATHAN O. GREENE, REG NO	ent via US Mail.	

Total Attachments: 6

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PATENT APPLICATION ASSIGNMENT

WHEREAS:

Names and Addresses of Inventors:

- Karuppasamy Muthukamatchy Plot #3, Kalainagar 1st Main Road, P&T Nagar Madurai, India
- (3) Eran Weiss 1604 Samedra Street Sunnyvale, CA 94087

- (2) Rajkumar Thanu 3707 Poinciana Drive, Unit 140 Santa Clara, CA 95051
- (4) Jeffrey C. Hudgens 21 Porter Street San Francisco, CA 94110
- (5) Chandrakant M. Sapkale Sobha Ruby Apartment Flat No. 4091, Nagasandra Post, Tumkur Road, Near Shell Petrol Bunk Karnataka, India 560073

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

ROBOT APPARATUS INCLUDING DUAL END EFFECTORS WITH VARIABLE PITCH AND METHODS

for which a patent application of the United States has been filed on June 7, 2019 as Serial No. 16/434,886; 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 Application), and the invention disclosed therein (hereinafter referred to as 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 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.

Atty. Docket No. 36119.565 (L0565.1) 1 of 2

PATENT REEL: 049893 FRAME: 0716

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 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.

<u>June 17</u> , 2019 (date)	Karuppasamy Muth Kamatchy
, 2019 (date)	Rajkumar Thanu
, 2019 (date)	Eran Weiss
, 2019 (date)	Jeffrey C. Hudgens
, 2019 (date)	Chandrakant Sapkale
Atty. Docket No. 36119.565 (L0565.1)	2 of 2

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

(date) , 2019

29 JULY 2019

. 2019

Karuppasamy Muthukamatchy

Rajkumar Thanu

Eran Weiss

_____, 2019 (date)

(date)

Jeffrey C. Hudgens

_____, 2019 (date)

Chandrakant Sapkale

2012

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	2019
(date)	

Karuppasamy Muthukamatchy

, 2019 (date)

Rajkumar Thanu

2019

1/Dias

_____, 2019 (date)

Jeffrey C. Hudgens

_____, 2019 (date)

Chandrakant Sapkale

2 of 2

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_____, 2019 (date)

Karuppasamy Muthukamatchy

1	2019
(date)	

Rajkumar Thanu

	2019
(date)	

. 2019

(date)

(dota)	2019	
(date)		

Eran Weiss

Hudgens

Chandrakant Sapkale

2012

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, 201	9	
(date)	9	Karuppasamy Muthukamatchy
(date)	9	Rajkumar Thanu
(date)		Eran Weiss
, 201 (date)	9	Jeffrey C. Hudgens
(date)	9	Chandrakant Sapkale

Atty. Docket No. 36119.565 (L0565.1)

2 of 2

RECORDED: 07/29/2019