

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5123702

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SIYUAN TIAN	08/31/2018
ERIC A. PAPE	09/04/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	LAM RESEARCH CORPORATION
<b>Street Address:</b>	4650 CUSHING PARKWAY
<b>City:</b>	FREMONT
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94538-6470
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16121229
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(612)339-3061
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<b>ATTORNEY DOCKET NUMBER:</b>	4948.022US1
<b>NAME OF SUBMITTER:</b>	CHERYL L. KNAPP
<b>SIGNATURE:</b>	/Cheryl L. Knapp/
<b>DATE SIGNED:</b>	09/04/2018
<b>Total Attachments: 4</b>	
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source=4948_22_assignment#page4.tif	

### ASSIGNMENT

WHEREAS, Siyuan Tian and Eric A. Pape (hereinafter the "Undersigned") have made one or more inventions and other subject matter (hereinafter collectively referred to as the "Invention"); as described in the patent application filed on \_\_\_\_\_, assigned US application serial number \_\_\_\_\_, and titled TWO-STAGE PIN LIFTER FOR DE-CHUCK OPERATIONS.

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency, and adequacy of which are hereby acknowledged by the Undersigned, the Undersigned do hereby irrevocably and unconditionally:

CONVEY, ASSIGN, AND TRANSFER to Lam Research Corporation (the "Assignee"), a corporation of the State of Delaware, having a place of business at 4650 Cushing Parkway, Fremont, CA 94538-6470, the Undersigned's entire right, title, and interest for the United States and all foreign countries and jurisdictions in and to:

the Invention which is disclosed in the above-identified application or applications;  
such application or applications, and all divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other applications for a patent or patents which have been or shall be filed in the United States (including all provisional and non-provisional applications), and in all foreign countries and jurisdictions based in whole or in part on any of such Invention (including any application for a utility model or an innovation patent application);

all original and reissued patents which have been or shall be issued in the United States and all foreign countries and jurisdictions based in whole or in part on any of such Invention;

including the right to claim priority to the above-identified patent application or applications in relation to subject matter based in whole or in part on the above-identified patent application or applications and any of the foregoing including the right to file foreign applications under the provisions of any convention or treaty;

and including the right to all causes of action, remedies, and other enforcement rights related to the above-identified application or applications, including without limitation the right to sue for past, present, or future infringement, misappropriation, or violation of any and all rights related to the above-identified patent application or applications and any of the foregoing, including the right to obtain and collect damages for past, present, or future infringement;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such Invention to the Assignee;

AUTHORIZE AND REQUEST that any attorney associated with U.S. Patent and Trademark Office (USPTO) Customer No. 21186 may (directly or through his/her designee) delete, insert, or alter any information related to the above-identified patent application or applications or any of the foregoing, after execution of this Assignment;

**Assignment**

Assignors: Siyuan Tian et al.

Title: TWO-STAGE PIN LIFTER FOR DE-CHUCK OPERATIONS

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Docket No: 4948.022US1

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WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or shall be made to others by the Undersigned, and that the full right to convey the same as herein expressed is possessed by the Undersigned;

COVENANT, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the Undersigned shall (1) execute all provisional, non-provisional, divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other patent applications for the invention; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers for the invention; (3) communicate to the Assignee all facts known to the Undersigned relating to the invention and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for the invention; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such invention in the Assignee, or for securing, maintaining and enforcing proper patent protection for the invention;

COVENANT, that should any provision of this agreement be held unenforceable by an authority of competent jurisdiction, such a ruling shall not affect the validity and enforceability of the remaining provisions.

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives, and successors of the Undersigned, and is to extend to the benefit of the successors, assigns, and nominees of the Assignee.

AGREED as of the date of my signature below:

**Assignment**

Assignors: Siyuan Tian et al.

Title: TWO-STAGE PIN LIFTER FOR DE-CHUCK OPERATIONS

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Docket No: 4948.022US1

Client Ref. No. 9219-IUS

**Assignor:**

(Signature): / Siyuan Tian /

Name: Siyuan Tian

City/State: Fremont, CA

Date: 8/31/2018

**Assignment**

Assignors: Siyuan Tian et al.

Title: TWO-STAGE PIN LIFTER FOR DE-CHUCK OPERATIONS

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Docket No: 4948.022US1

Client Ref. No. 9219-IUS

**Assignor:**

(Signature):

/ Eric A. Pape /

Name: Eric A. Pape

City/State: Acton, CA

Date:

9/4/2018