PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHAEL X. YANG	02/05/2019
HUA CHUNG	02/15/2019
XINLIANG LU	02/04/2019
TING XIE	01/31/2019
HAOCHEN LI	01/30/2019
QI ZHANG	01/30/2019

RECEIVING PARTY DATA

Name:	MATTSON TECHNOLOGY, INC.
Street Address:	47131 BAYSIDE PARKWAY
City:	FREMONT
State/Country:	CALIFORNIA
Postal Code:	94538

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16522193

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email:docketing@dority-manning.comCorrespondent Name:DORITY & MANNING, P.A.Address Line 1:POST OFFICE BOX 1449

Address Line 4: GREENVILLE, SOUTH CAROLINA 29602-1449

ATTORNEY DOCKET NUMBER:	AGX-321-CON
NAME OF SUBMITTER:	J. PARKS WORKMAN
SIGNATURE:	/j. parks workman/
DATE SIGNED:	07/26/2019

Total Attachments: 4

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PATENT REEL: 049871 FRAME: 0123

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PATENT REEL: 049871 FRAME: 0124

ATTORNEY DOCKET NUMBER: AGX-321

JOINT ASSIGNMENT OF WORLDWIDE RIGHTS

WHEREAS, we, Michael X. Yang, a citizen of the United States, residing in Palo Alto, California, USA; Hua Chung, a citizen of the United States, residing in Saratoga, California, USA; Xinliang Lu, a citizen of the United States, residing in Fremont, California, USA; Haochen Li, a citizen of China, residing in Fremont, California, USA; Ting Xie, a citizen of China, residing in Fremont, California, USA; and Qi Zhang a citizen of PR China, residing in San Jose, California, USA; and as assignors, have made an invention entitled

"INTEGRATION OF MATERIALS REMOVAL AND SURFACE TREATMENT IN SEMICONDUCTOR DEVICE FABRICATION"

as described in a patent application for U.S. Letters Patent bearing U.S. Serial No. 16/216,006, which was filed in the U.S. Patent and Trademark Office on December 11, 2018; and

WHEREAS, Mattson Technology, Inc., 47131 Bayside Parkway, Fremont, CA 94538, as assignee, is desirous of securing the entire right, title and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW, THEREFORE, be it known that for good and valuable consideration the receipt of which from assignee is hereby acknowledged, we, as assignors, have assigned, transferred, and set over, and do hereby assign, transfer, and set over unto the assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all applications claiming priority to this application, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof, and all rights to sue and recover for past, present, and future infringement thereof, and we hereby authorize and request the Commissioner for Patents of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Agreement.

AND, WE HEREBY covenant that we have the full right to convey the interest assigned by this Assignment, and we have not executed, and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that we will, without further consideration, communicate with assignee, its successors and assigns, any facts known to us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title of this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

IN WITNESS WHEREOF, Assignors have executed this document on the date indicated below.

	5/5/5018
Michael X. Yang	Date
	2/5/2019
Hua Chung	Date /
Kirlvey Ly	2/4/2019
Xinliang Lu	Date
Haochen Li	Date
	1/31/2019
Ting Xie	Date
Qi Zhang	Date

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Michael X. Yang	Date
Hua Chung	Date
Xinliang Lu	Date
Haw Shendi	0/.30.19
Haochen Li	Date
Ting Xie	Date
Qi Zhang	Date

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Hua Chung	Date
Xinliang Lu	Date
Haochen Li	Date
Ting Xie	Date
Ting Xie	1/30/2019
Qi Zhang	Date