TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM539866

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
MATTSON TECHNOLOGY, INC.		08/21/2018	Corporation: DELAWARE

RECEIVING PARTY DATA

Name:	EAST WEST BANK
Street Address:	2350 MISSION COLLEGE BLVD., SUITE 988
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054
Entity Type:	CORPORATION: CALIFORNIA

PROPERTY NUMBERS Total: 2

Property Type	Number	Word Mark
Serial Number:	88524547	RETT
Serial Number:	88221153	HYDRILIS

CORRESPONDENCE DATA

Fax Number: 6506440520

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.

Phone: 6506483802
Email: PATTY@PATTYCHENG.COM
Correspondent Name: PATTY CHENG
Address Line 1: 2625 MIDDLEFIELD RD., #215
Address Line 4: PALO ALTO, CALIFORNIA 94306

NAME OF SUBMITTER:	Patty Cheng
SIGNATURE:	/s/ Patty Cheng
DATE SIGNED:	09/06/2019

Total Attachments: 13
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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of August 21, 2018 by and between Mattson Technology, Inc., a Delaware corporation ("Borrower"), and East West Bank, a California corporation ("Lender").

RECITALS

Lender has agreed to make certain advances of money and to extend certain financial accommodations to Borrower under that certain Loan and Security Agreement by and between Lender and Borrower dated of even date herewith (as amended, restated, modified or otherwise supplemented from time to time, the "Loan Agreement"). Capitalized terms used herein are used as defined in the Loan Agreement. Pursuant to the terms of the Loan Agreement, Borrower has granted to Lender a security interest in its personal property.

NOW, THEREFORE, Borrower agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement and under any other agreement now existing or hereafter arising between Borrower and Lender, subject to any applicable limitations on the collateral set forth in the Loan Agreement, Borrower grants to Lender a security interest in all of Borrower's right, title and interest in, its intellectual property (including without limitation those copyrights, patents and trademarks listed on Schedules A, B and C hereto) and all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part thereof. Borrower represents and warrants that Schedules A, B, and C attached hereto set forth as of the date hereof any and all intellectual property rights in connection to which Borrower has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

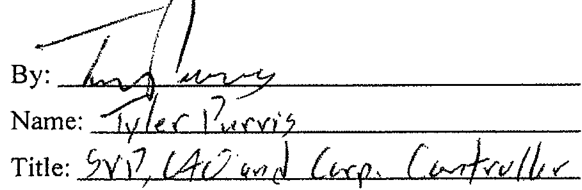
This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute the same instrument. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf" signature page were an original hereof.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

BORROWER:

Mattson Technology, Inc.



By: ______________________

Name: Tyler Purvis

Title: SVP, CAO and Corp. Controller

Address of Borrower:

47131 Bayside Parkway
Fremont, CA 94538
Attn: Tyler Purvis
FAX: (510) 492-5963
EMAIL: Tyler.Purvis@Mattson.com

LENDER:

East West Bank

By: ______________________

Name: ______________________

Title: ______________________

Address of Lender:

2350 Mission College Blvd., Suite 988
Santa Clara, CA 95054
Attn: Kelvin Chan

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

BORROWER:

Mattson Technology, Inc.

By: ______________________________

Name: ______________________________

Title: ______________________________

Address of Borrower:

47131 Bayside Parkway
Fremont, CA 94538
Attn: Tyler Purvis
FAX: (510) 492-5963
EMAIL: Tyler.Purvis@Mattson.com

LENDER:

East West Bank

By: ______________________________

Name: Kelvin Chan

Title: Managing Director

Address of Lender:

2350 Mission College Blvd., Suite 988
Santa Clara, CA 95054
Attn: Kelvin Chan

SCHEDULE A

Copyrights

Description	Registration Number	Registration Date
None		

SCHEDULE B

PATENTS
*Indicates expired

Title Description	Patent/App. Number	Issue/App. Date
INTEGRATED VACUUM AND PLATING CLUSTER SYSTEM	6017820 *	25-Jan-2000
APPARATUS AND PROCESS FOR MEASURING THE TEMPERATURE OF SEMICONDUCTOR WAFERS IN THE PRESENCE OF RADIATION ABSORBING GASES	6034357 *	07-Mar-2000
METHOD OF MEASURING ELECTROMAGNETIC RADIATION	6191392	20-Feb-2001
PROCESS FOR FORMING THIN DIELECTRIC LAYERS IN SEMICONDUCTOR DEVICES	6281141	28-Aug-2001
HIGH-TEMPERATURE SHORT TIME CURING OF LOW DIELECTRIC CONSTANT MATERIALS USING RAPID THERMAL PROCESSING TECHNIQUES	6303524	16-Oct-2001
SPATIALLY RESOLVED TEMPERATURE MEASUREMENT AND IRRADIANCE CONTROL	6303411	16-Oct-2001
METHOD OF MEASURING ELECTROMAGNETIC RADIATION	6369363	09-Apr-2002
SYSTEMS AND METHODS FOR EPITAXIAL PROCESSING OF A SEMICONDUCTOR SUBSTRATE	6436796	20-Aug-2002
GAS DRIVEN ROTATING SUSCEPTOR FOR RAPID THERMAL PROCESSING (RTP) SYSTEMS	6449428	10-Sep-2002
OPTICAL RADIATION MEASUREMENT APPARATUS	6462315	08-Oct-2002
SPATIALLY RESOLVED TEMPERATURE MEASUREMENT AND IRRADIANCECONTROL	6534752	18-Mar-2003
WINDOWS USED IN THERMAL PROCESSING CHAMBERS	6559424	06-May-2003
METHOD AND DEVICE FOR CALIBRATING MEASUREMENTS OF TEMPERATURES INDEPENDENT OF EMISSIVITY	6561694	13-May-2003
METHOD OF PRODUCING A SEMICONDUCTOR SURFACE COVERED WITH FLUORINE	6566271	20-May-2003
HEAT TREATING METHODS AND SYSTEMS	6594446	15-Jul-2003
RAPID THERMAL PROCESSING SYSTEM FOR INTEGRATED CIRCUITS	6600138	29-Jul-2003
DEVICE AND METHOD FOR THERMALLY TREATING SUBSTRATES	6614005	02-Sep-2003
HIGH INTENSITY ELECTROMAGNETIC RADIATION APPARATUS AND METHOD	6621199	16-Sep-2003
DOOR SYSTEMS FOR LOW CONTAMINATION, HIGH THROUGHPUT HANDLING OF WORKPIECES FOR VACUUM PROCESSING	6647665	18-Nov-2003
SYSTEMS AND METHODS FOR ENHANCING PLASMA PROCESSING OF A SEMICONDUCTOR SUBSTRATE	6706142	16-Mar-2004
HEATING DEVICE FOR HEATING SEMICONDUCTOR WAFERS IN THERMAL PROCESSING CHAMBERS	6717158	06-Apr-2004
METHOD AND APPARATUS FOR THE THERMAL TREATMENT OF SUBSTRATES	6752625	22-Jun-2004
HEATING DEVICE FOR HEATING SEMICONDUCTOR WAFERS IN THERMAL PROCESSING CHAMBERS	6771895	03-Aug-2004

TRADEMARK
REEL: 006738 FRAME: 0743

Title Description	Patent/App. Number	Issue/App. Date
METHOD AND SYSTEM FOR ROTATING A SEMICONDUCTOR WAFER IN PROCESSING CHAMBERS	6770146	03-Aug-2004
ADJUSTING OF DEFECT PROFILES IN CRYSTAL OR CRYSTALLINE-LIKE STRUCTURES	6809011	26-Oct-2004
PULSE PRECURSOR DEPOSITION PROCESS FOR FORMING LAYERS IN SEMICONDUCTOR DEVICES	6808758	26-Oct-2004
METHOD FOR THE REMOVAL OF ABSORBED MOLECULES FROM A CHAMBER	6830631	14-Dec-2004
APPARATUS AND METHOD FOR REDUCING STRAY LIGHT IN SUBSTRATE PROCESSING CHAMBERS	6835914	28-Dec-2004
APPARATUS AND METHOD FOR MEASURING THE TEMPERATURE OF SUBSTRATES	6847012	25-Jan-2005
PULSED PROCESSING SEMICONDUCTOR HEATING METHODS USING COMBINATIONS OF HEATING SOURCES	6849831	01-Feb-2005
SYSTEMS AND METHODS FOR EPITAXIALLY DEPOSITING FILMS ON A SEMICONDUCTOR SUBSTRATE	6902622	07-Jun-2005
METHOD FOR RAPIDLY HEATING AND COOLING SEMICONDUCTOR WAFERS	6919271	19-Jul-2005
HEAT TREATING METHODS AND SYSTEMS	6941063	06-Sep-2005
PULSED PROCESSING SEMICONDUCTOR HEATING METHODS USING COMBINATIONS OF HEATING SOURCES	6951996	04-Oct-2005
APPARATUS FOR THERMAL TREATMENT OF SUBSTRATES	6953338	11-Oct-2005
HEAT TREATING METHODS AND SYSTEMS	6963692	08-Nov-2005
HEATING CONFIGURATION FOR USE IN THERMAL PROCESSING CHAMBERS	6970644	29-Nov-2005
SYSTEM AND PROCESS FOR HEATING SEMICONDUCTOR WAFERS BY OPTIMIZING ABSORPTION OF ELECTROMAGNETIC ENERGY	7015422	21-Mar-2006
A HEATING DEVICE FOR HEATING SEMICONDUCTOR WAFERS IN THERMAL PROCESSING CHAMBERS	7038174	02-May-2006
LOCALIZED HEATING AND COOLING OF SUBSTRATES	7037797	02-May-2006
METHOD AND APPARATUS FOR THE THERMAL TREATMENT OF SUBSTRATES	7041610	09-May-2006
SHADOW-FREE SHUTTER ARRANGEMENT AND METHOD	7045746	16-May-2006
METHOD AND DEVICE FOR THERMAL TREATMENT OF SUBSTRATES	7056389	06-Jun-2006
METHOD FOR MINIMIZING THE VAPOR DEPOSITION OF TUNGSTEN OXIDE DURING THE SELECTIVE SIDE WALL OXIDATION OF TUNGSTEN-SILICON GATES	7094637	22-Aug-2006
METHOD AND APPARATUS FOR THERMALLY TREATING DISK-SHAPED SUBSTRATES	7098157	29-Aug-2006
METHOD OF FORMING AND/OR MODIFYING A DIELECTRIC FILM ON A SEMICONDUCTOR SUBSTRATE	7101812	05-Sep-2006
SELECTIVE REFLECTIVITY PROCESS CHAMBER WITH CUSTOMIZED WAVELENGTH RESPONSE AND METHOD	7115837	03-Oct-2006
APPARATUS AND METHOD FOR REDUCING STRAY LIGHT IN SUBSTRATE CHAMBERS	7135656	14-Nov-2006

Title Description	Patent/App. Number	Issue/App. Date
METHOD AND APPARATUS FOR THE PRODUCTION OF PROCESS GAS THAT INCLUDES WATER VAPOR AND HYDROGEN FORMED BY BURNING OXYGEN IN A HYDROGEN-RICH ENVIRONMENT	7144826	05-Dec-2006
METHOD FOR THERMALLY TREATING A SUBSTRATE THAT COMPRISES SEVERAL LAYERS	7144747	05-Dec-2006
DEVICE AND METHOD FOR THERMALLY TREATING SEMICONDUCTOR WAFERS	7151060	19-Dec-2006
METHOD OF PRODUCING A CALIBRATION WAFER	7169717	30-Jan-2007
APPARATUSES AND METHODS FOR RESISTIVELY HEATING A THERMAL PROCESSING SYSTEM	7176417	13-Feb-2007
ENHANCED RAPID THERMAL PROCESSING APPARATUS AND METHOD	7184657	27-Feb-2007
FAST HEATING AND COOLING APPARATUS FOR SEMICONDUCTOR WAFERS	7226488	05-Jun-2007
SLOTTED ELECTROSTATIC SHIELD MODIFICATION FOR IMPROVED ETCH AND CVD PROCESS UNIFORMITY	7232767	19-Jun-2007
HEATING CONFIGURATION FOR USE IN THERMAL PROCESSING CHAMBERS	7269343	11-Sep-2007
MULTI-WORKPIECE PROCESSING CHAMBER	7276122	02-Oct-2007
METHOD AND APPARATUS FOR THERMALLY TREATING SUBSTRATES	7316969	08-Jan-2008
PULSED PROCESSING SEMICONDUCTOR HEATING METHODS USING COMBINATIONS OF HEATING SOURCES	7317870	08-Jan-2008
APPARATUS AND METHOD FOR REDUCING STRAY LIGHT IN SUBSTRATE PROCESSING CHAMBERS	7358462	15-Apr-2008
SYSTEM AND METHOD FOR REMOVAL OF PHOTORESIST AND RESIDUES FOLLOWING CONTACT ETCH WITH A STOP LAYER PRESENT	7361605	22-Apr-2008
ENHANCED RAPID THERMAL PROCESSING APPARATUS AND METHOD	7398014	08-Jul-2008
PROCESS FOR DETERMINING THE TEMPERATURE OF A SEMICONDUCTOR WAFER IN A RAPID HEATING UNIT	7412299	12-Aug-2008
TEMPERATURE MEASUREMENT AND HEAT-TREATING METHODS AND SYSTEMS	7445382	04-Nov-2008
SYSTEM AND PROCESS FOR HEATING SEMICONDUCTOR WAFERS BY OPTIMIZING ABSORPTION OF ELECTROMAGNETIC ENERGY	7453051	18-Nov-2008
APPARATUSES AND METHODS FOR SUPPRESSING THERMALLY-INDUCED MOTION OF A WORKPIECE	7501607	10-Mar-2009
APPARATUS AND METHOD FOR MEASURING THE TEMPERATURE OF SUBSTRATES	7528348	05-May-2009
METHODS FOR DETERMINING WAFER TEMPERATURE	7543981	09-Jun-2009
LOW COST HIGH THROUGHPUT PROCESSING PLATFORM	7563068	21-Jul-2009
A HEATING DEVICE FOR HEATING SEMICONDUCTOR WAFERS IN THERMAL PROCESSING CHAMBERS	7608802	27-Oct-2009
TEMPERATURE MEASUREMENT AND HEAT-TREATING METHODS AND SYSTEMS	7616872	10-Nov-2009
RAPID THERMAL PROCESSING USING ENERGY TRANSFER LAYERS	7642205	05-Jan-2010

Title Description	Patent/App. Number	Issue/App. Date
END EFFECTORS FOR HANDLING SEMICONDUCTOR WAFERS	7654596	02-Feb-2010
ADVANCED LOW COST HIGH THROUGHPUT PROCESSING PLATFORM	7658586	09-Feb-2010
METHOD FOR THE THERMAL TREATMENT OF DISK-SHAPED SUBSTRATES	7704898	27-Apr-2010
SYSTEM AND PROCESS FOR CALIBRATING PYROMETERS IN THERMAL PROCESSING CHAMBERS	7734439	08-Jun-2010
SELECTIVE REFLECTIVITY PROCESS CHAMBER WITH CUSTOMIZED WAVELENGTH RESPONSE AND METHOD	7737385	15-Jun-2010
DETERMINING THE POSITION OF A SEMICONDUCTOR SUBSTRATE ON A ROTATION DEVICE	7746482	29-Jun-2010
OPTIMIZING THE THERMAL BUDGET DURING A PULSED HEATING PROCESS	7745762	29-Jun-2010
HIGH INTENSITY ELECTROMAGNETIC RADIATION APPARATUS AND METHODS	7781947	24-Aug-2010
SYSTEM & METHOD FOR REMOVAL OF PHOTORESIST IN TRANSISTOR FABRICATION FOR INTEGRATED CIRCUIT MANUFACTURING	7799685	21-Sep-2010
SYSTEM AND PROCESS FOR HEATING SEMICONDUCTOR WAFERS BY OPTIMIZING ABSORPTION OF ELECTROMAGNETIC ENERGY	7847218	07-Dec-2010
HEATING CONFIGURATION FOR USE IN THERMAL PROCESSING CHAMBERS	7949237	24-May-2011
POST ION IMPLANT PHOTORESIST STRIP USING A PATTERN FILL AND METHOD	7947605	24-May-2011
SYSTEM AND PROCESS FOR CALIBRATING PYROMETERS IN THERMAL PROCESSING CHAMBERS	7957926	07-Jun-2011
WORKPIECE SUPPORT WITH FLUID ZONES FOR TEMPERATURE CONTROL	7972444	05-Jul-2011
DETERMINING THE TEMPERATURE OF SILICON AT HIGH TEMPERATURES	7976216	12-Jul-2011
METHOD AND SYSTEM FOR THERMALLY PROCESSING A PLURALITY OF WAFER-SHAPED OBJECTS	7977258	12-Jul-2011
PULSED PROCESSING SEMICONDUCTOR HEATING METHODS AND ASSOCIATED SYSTEM USING COMBINATIONS OF HEATING SOURCES	8000587	16-Aug-2011
IRRADIANCE PULSE HEAT-TREATING METHODS AND APPARATUS	8005351	23-Aug-2011
MULTI-WORKPIECE PROCESSING CHAMBER	8066815	29-Nov-2011
AADVANCED PROCESSING TECHNIQUE AND SYSTEM FOR PRESERVING TUNGSTEN IN A DEVICE STRUCTURE	8093157	10-Jan-2012
END EFFECTORS FOR HANDLING SEMICONDUCTOR WAFERS	8109549	07-Feb-2012
A HEATING DEVICE FOR HEATING SEMICONDUCTOR WAFERS IN THERMAL PROCESSING CHAMBERS	8138451	20-Mar-2012
RAPID THERMAL PROCESSING USING ENERGY TRANSFER LAYERS	8138105	20-Mar-2012
METHOD AND SYSTEM FOR DETERMINING OPTICAL PROPERTIES OF SEMICONDUCTOR WAFERS	8152365	10-Apr-2012
METHODS FOR DETERMINING WAFER TEMPERATURE	8157439	17-Apr-2012

Title Description	Patent/App. Number	Issue/App. Date
SYSTEM AND PROCESS FOR HEATING SEMICONDUCTOR WAFERS BY OPTIMIZING ABSORPTION OF ELECTROMAGNETIC ENERGY	8222570	17-Jul-2012
METHOD AND APPARATUS FOR GROWING THIN OXIDE FILMS ON SILICON WHILE MINIMIZING IMPACT ON EXISTING STRUCTURES	8236706	07-Aug-2012
CALIBRATION SUBSTRATE AND METHOD OF CALIBRATION THEREFOR	8282272	09-Oct-2012
SYSTEM AND PROCESS FOR CALIBRATING PYROMETERS IN THERMAL PROCESSING CHAMBERS	8296091	23-Oct-2012
VERFAHREN UND VORRICHTUNG ZUR ERMITTLUNG VON MESSWERTEN/METHOD AND APPARATUS TO DETERMINE MEASUREMENT VALUES	8335658	18-Dec-2012
HIGH INTENSITY ELECTROMAGNETIC RADIATION APPARATUS AND METHODS	8384274	26-Feb-2013
ELECTROSTATIC CHUCK SYSTEM AND PROCESS FOR RADIALLY TUNING THE TEMPERATURE PROFILE ACROSS THE SURFACE OF A SUBSTRATE	8405005	26-Mar-2013
SLOTTED ELECTROSTATIC SHIELD MODIFICATION FOR IMPROVED ETCH AND CVD PROCESS UNIFORMITY	8413604	09-Apr-2013
METHODS AND SYSTEMS FOR SUPPORTING A WORKPIECE AND FOR HEAT TREATING THE WORKPIECE	8434341	07-May-2013
INDUCTIVE PLASMA SOURCE WITH HIGH COUPLING EFFICIENCY	8444870	21-May-2013
APPARATUS FOR THERMALLY TREATING SEMICONDUCTOR SUBSTRATES	8450652	28-May-2013
SYSTEMS AND METHODS FOR SUPPORTING A WORKPIECE DURING HEAT-TREATING	8454356	04-Jun-2013
RAPID THERMAL PROCESSING USING ENERGY TRANSFER LAYERS	8557721	15-Oct-2013
MONITORING WITNESS STRUCTURES FOR TEMPERATURE CONTROL IN RTP SYSTEMS	8575521	05-Nov-2013
END EFFECTORS FOR HANDLING SEMICONDUCTOR WAFERS	8622451	07-Jan-2014
SYSTEM AND PROCESS FOR HEATING SEMICONDUCTOR WAFERS BY OPTIMIZING ABSORPTION OF ELECTROMAGNETIC ENERGY	8669496	11-Mar-2014
METHODS FOR DETERMINING WAFER TEMPERATURE	8668383	11-Mar-2014
LOW COST HIGH THROUGHPUT PROCESSING PLATFORM	8668422	11-Mar-2014
IRRADIANCE PULSE HEAT-TREATING METHODS AND APPARATUS	8693857	08-Apr-2014
METHOD AND SYSTEM FOR DETERMINING OPTICAL PROPERTIES OF SEMICONDUCTOR WAFERS	8696197	15-Apr-2014
METHOD FOR FORMING MICRO LENSES	8801947	12-Aug-2014
PULSED PROCESSING SEMICONDUCTOR HEATING METHODS AND ASSOCIATED SYSTEM USING COMBINATIONS OF HEATING SOURCES	8837923	16-Sep-2014
SYSTEM AND PROCESS FOR CALIBRATING PYROMETERS IN THERMAL PROCESSING CHAMBERS	8918303	23-Dec-2014
INDUCTIVE PLASMA SOURCE WITH HIGH COUPLING EFFICIENCY	8920600	30-Dec-2014
PLASMA REACTOR WITH INDUCTIVE EXCITATION OF PLASMA AND EFFICIENT REMOVAL OF HEAT FROM THE EXCITATION COIL	8992725	31-Mar-2015

Title Description	Patent/App. Number	Issue/App. Date
WORKPIECE BREAKAGE PREVENTION METHOD AND APPARATUS	9070590	30-Jun-2015
APPARATUS FOR THE HEAT TREATMENT OF DISC SHAPED SUBSTRATES	9111970	18-Aug-2015
ADVANCED MULTI-WORKPIECE PROCESSING CHAMBER	9184072	10-Nov-2015
HIGH EFFICIENCY PLASMA SOURCE	9214319	15-Dec-2015
APPARATUS AND METHODS FOR GENERATING ELECTROMAGNETIC RADIATION	9245730	26-Jan-2016
METHODS, APPARATUS AND MEDIA FOR DETERMINING A SHAPE OF AN IRRADIANCE PULSE TO WHICH A WORKPIECE IS TO BE EXPOSED	9279727	08-Mar-2016
NOVEL MASK REMOVAL PROCESS STRATEGY FOR VERTICAL NAND DEVICE	9396963	19-Jul-2016
REPEATABLE HEAT-TREATING METHODS AND APPARATUS	9482468	01-Nov-2016
LOW COST HIGH THROUGHPUT PROCESSING PLATFORM	9493306	15-Nov-2016
METHODS AND SYSTEMS FOR SUPPORTING A WORKPIECE AND FOR HEAT TREATING THE WORKPIECE	9627244	18-Apr-2017
SELECTIVE REFLECTIVITY PROCESS CHAMBER WITH CUSTOMIZED WAVELENGTH RESPONSE AND METHOD	9633876	25-Apr-2017
INDUCTIVELY COUPLED PLASMA SOURCE FOR PLASMA PROCESSING	9653264	16-May-2017
SUBSTRATE BREAKAGE DETECTION IN A THERMAL PROCESSING SYSTEM	9941144	10-Apr-2018
SYSTEM AND METHOD FOR PROTECTION OF VACUUM SEALS IN PLASMA PROCESSING SYSTEMS	10049858	14-Aug-2018
INDUCTIVE PLASMA SOURCE WITH HIGH COUPLING EFFICIENCY	10037867	31-July-2018
Plasma reactor with inductive excitation of plasma and efficient removal of heat from the excitation coil	14/665684	**10/2/18**
[redacted]	15/650164	
[redacted]	15/589127	
[redacted]	14/406256	
Controlling azimuthal uniformity of etch process in plasma processing chamber	15/073048	**05/21/19**
[redacted]	15/403455	
[redacted]	15/386538	
[redacted]	15/377121	
[redacted]	15/378580	
Substrate breakage detection in a thermal processing system	15/909231	**03/26/19**
[redacted]	15/378509	
Fluid leakage detection for a millisecond anneal system	10/359334 (15/377217)	**7/23/19**
[redacted]	15/380191	
[redacted]	15/380221	
[redacted]	15/380139	
Pre-heat processes for millisecond anneal system	15/417470	**4/16/19**
Implanted photoresist stripping process	15/441332	**09/18/18**
[redacted]	15/591163	

Title Description	Patent/App. Number	Issue/App. Date
[redacted]	15/597283	
[redacted]	15/726437	
[redacted]	15/936744	
[redacted]	15/582896	
[redacted]	15/896124	
[redacted]	**62/559778**	
Material Deposition Prevention on a Workpiece in a Process Chamber	15/936764	03/27/18
[redacted]	**62/546269**	
[redacted]	**15/892723**	
[redacted]	**62/610582**	
[redacted]	**15/851922**	
[redacted]	**15/888257**	
[redacted]	**62/610588**	
[redacted]	**15/888283**	
[redacted]	**62/610601**	
Surface treatment of silicon or silicon germanium surfaces using organic radicals	15/958560	**07/16/19**
Surface treatment of carbon containing films using organic radicals	15/958601	**4/23/19**
Surface treatment of silicon and carbon containing films by remote plasma with organic precursors	15/958635	**04/20/18**
[redacted]	**62/567295**	
[redacted]	**62/578725**	
Surface treatment of substrates using passivation layers	15/843043	**02/26/19**
[redacted]	**62/610573**	
[redacted]	**62/599105**	
[redacted]	**62/645476**	
[redacted]	**62/656428**	
[redacted]	**15/951291**	
[redacted]	**62/657114**	
[redacted]	**62/658117**	
[redacted]	**62/689475**	
[redacted]	**16/020178**	
[redacted]	**62/685564**	
[redacted]	**62/685608**	
[redacted]	**62/683246**	
System and process for calibrating pyrometers in thermal processing chambers	14/567631	**1/29/19**
Integration of materials removal and surface treatment in semiconductor device fabrication	**10/403492**	**9/3/19**
Substrate breakage detection in a thermal processing system	**10/388552**	**8/20/19**
Controlling Azimuthal Uniformity of Etch Process in Plasma Processing Chamber	**16/386557**	**04/17/19**
Surface treatment of carbon containing films using organic radicals	**16/357800**	**3/19/19**
Surface Treatment of Substrates Using Passivation Layers	**16/282909**	**02/22/19**
Plasma Processing Apparatus and Methods	**16/218931**	12/13/18

Title Description	Patent/App. Number	Issue/App. Date
Processing of Semiconductors Using Vaporized Solvents	**16/208003**	**12/3/18**
Inductively Coupled Plasma Wafer Bevel Strip Apparatus	**16/162741**	**10/17/18**
Cooled Focus Ring for Plasma Processing Apparatus	**16/103100**	**08/14/18**
Thermal Processing of Closed Shape Workpieces	**16/059148**	**08/09/18**

SCHEDULE C

Trademarks

Description	Serial Number	Registration Number
MATTSON TECHNOLOGY	87563778	
ATOMIC SURFACE ENGINEERING	87563850	
ATOMIC INTERFACE ENGINEERING	87563834	
AGILIS	87715568	
NOVYKA	87688747	
SUPREMA	78767551	3363448
FRTP	78964076	*
SUPRA	78782381	*
MILLIOS	77226992	3998402
PARADIGME	77036643	3655138
NEXION	77041390	*
ALPINE	77322086	3544715
SUPREMAXE	77469486	*
HOT SHIELD	77036598	*
MAXUS	76625601	*
HYBRID ATOMIC LAYER CVD	76422220	*
HAL-CVD	76422219	*
HYBRID ATOMIC LAYER DEPOSITION	76422218	*
VORTEK	73578996	1438539
ASPEN	88082123	
SCISSORBOT	88064123	
RETT	**88524547**	
HYDRILIS	**88221153**	
NOVKYA OLEO	**88104705**	*
NOVYKA AQUA	**88104697**	*

*Indicates dead, abandoned or cancelled trademark