

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Merritt Funk</td><td>02/18/2009</td></tr><tr><td>Daniel J. Prager</td><td>02/19/2009</td></tr><tr><td>Asao Yamashita</td><td>02/19/2009</td></tr><tr><td>Radha Sundararajan</td><td>02/19/2009</td></tr></tbody></table>	Name	Execution Date	Merritt Funk	02/18/2009	Daniel J. Prager	02/19/2009	Asao Yamashita	02/19/2009	Radha Sundararajan	02/19/2009	
Name	Execution Date										
Merritt Funk	02/18/2009										
Daniel J. Prager	02/19/2009										
Asao Yamashita	02/19/2009										
Radha Sundararajan	02/19/2009										
RECEIVING PARTY DATA											
Name:	Tokyo Electron Limited										
Street Address:	Akasaka Biz Tower										
Internal Address:	3-1 Akasaka 5-chome, Minato-ku										
City:	Tokyo										
State/Country:	JAPAN										
Postal Code:	107-6325										
PROPERTY NUMBERS Total: 1											
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>12391410</td></tr></tbody></table>	Property Type	Number	Application Number:	12391410							
Property Type	Number										
Application Number:	12391410										
CORRESPONDENCE DATA											
Fax Number:	(480)569-2100										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
Phone:	480-539-2102										
Email:	MELODY.DUNKLEBERGER@US.TEL.COM										
Correspondent Name:	TOKYO ELECTRON U.S. HOLDINGS, INC.										
Address Line 1:	4350 W. CHANDLER BLVD.										
Address Line 2:	SUITE 10										
Address Line 4:	CHANDLER, ARIZONA 85226										
ATTORNEY DOCKET NUMBER:	ES-141										
NAME OF SUBMITTER:	James Klekotka										

CH \$40.00 12391410

500789242

PATENT
REEL: 022301 FRAME: 0650

Total Attachments: 6

source=ES-141_Signed_assign01#page1.tif

source=ES-141_Signed_assign01#page2.tif

source=ES-141_Signed_assign02#page1.tif

source=ES-141_Signed_assign02#page2.tif

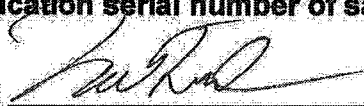
source=ES-141_Signed_assign03#page1.tif

source=ES-141_Signed_assign03#page2.tif

ASSIGNMENT OF INVENTION AND PATENTS THEREON

For valuable consideration, I/we, **Merritt Funk, Daniel J. Prager, Asao Yamashita, Radha Sundrararajan**, hereby assign to **Tokyo Electron Limited**, a Corporation of Japan and having a place of business at **Akasaka Biz Tower, 3-1 Akasaka 5-chome, Minato-ku, Tokyo 107-6325, Japan**, and its successors and assigns (collectively hereinafter called "the Assignee"), my entire right, title and interest throughout the world in the inventions and improvements which are subject of an application of United States Patent entitled **Creating Metal Gate Structures Using Lithography-Etch-Lithography-Etch (LELE) Processing Sequences**, and filed on

02/24/2009 as Patent Application No. **12/391410** preparatory to obtaining Letters Patent of the United States therefore, this assignment including said application, any continuation, division or continuation-in-part thereof and/or substituted therefore, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and agree for myself and my heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment. **I hereby authorize and request that any one of the attorneys or agents of Tokyo Electron U.S. Holdings, 2400 Grove Boulevard, Austin, Texas 78741, to insert herein the filing date and application serial number of said application when known.**

Inventor's Signature: 

Date: 2/18/09

Full Name: Merritt Funk

Residence: 8412 Silver Mountain Cove
Austin, Texas 78737 USA

Inventor's Signature: _____ Date: _____

Full Name: Daniel J. Prager

Residence: 89 Shagbark Lane
Hopewell Junction, New York 12533

Inventor's Signature: _____ Date: _____

Full Name: Asao Yamashita

Residence: 734 Huntington Drive
Fishkill, New York 12524 USA

Inventor's Signature: _____ Date: _____

Full Name: Radha Sundararajan

Residence: 149 Catfish Cove
Dripping Springs, Texas 78620 USA

ASSIGNMENT OF INVENTION AND PATENTS THEREON

For valuable consideration, I/we, **Merritt Funk, Daniel J. Prager, Asao Yamashita, Radha Sundrarajan**, hereby assign to **Tokyo Electron Limited**, a Corporation of Japan and having a place of business at **Akasaka Biz Tower, 3-1 Akasaka 5-chome, Minato-ku, Tokyo 107-6325, Japan**, and its successors and assigns (collectively hereinafter called "the Assignee"), my entire right, title and interest throughout the world in the inventions and improvements which are subject of an application of United States Patent entitled **Creating Metal Gate Structures Using Lithography-Etch-Lithography-Etch (LELE) Processing Sequences**, and filed on 02/24/2009 as Patent Application No. 12/391410 preparatory to obtaining Letters Patent of the United States therefore, this assignment including said application, any continuation, division or continuation-in-part thereof and/or substituted therefore, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and agree for myself and my heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment. I hereby authorize and request that any one of the attorneys or agents of **Tokyo Electron U.S. Holdings, 2400 Grove Boulevard, Austin, Texas 78741**, to insert herein the filing date and application serial number of said application when known.

Inventor's Signature: _____ Date: _____

Full Name: Merritt Funk
Residence: 8412 Silver Mountain Cove
Austin, Texas 78737 USA

Attorney Docket No. ES-141

Inventor's Signature: _____ Date: _____

Full Name: Daniel J. Prager
Residence: 89 Shagbark Lane
Hopewell Junction, New York 12533

Inventor's Signature: Asao Yamashita Date: 02-19-2009

Full Name: Asao Yamashita
Residence: 734 Huntington Drive
Fishkill, New York 12524 USA

Inventor's Signature: _____ Date: _____

Full Name: Radha Sundararajan
Residence: 149 Catfish Cove
Dripping Springs, Texas 78620 USA

ASSIGNMENT OF INVENTION AND PATENTS THEREON

For valuable consideration, I/we, **Merritt Funk, Daniel J. Prager, Asao Yamashita, Radha Sundrararajan**, hereby assign to **Tokyo Electron Limited**, a Corporation of Japan and having a place of business at **Akasaka Biz Tower, 3-1 Akasaka 5-chome, Minato-ku, Tokyo 107-6325, Japan**, and its successors and assigns (collectively hereinafter called "the Assignee"), my entire right, title and interest throughout the world in the inventions and improvements which are subject of an application of United States Patent entitled **Creating Metal Gate Structures Using Lithography-Etch-Lithography-Etch (LELE) Processing Sequences**, and filed on 02/24/2009 as Patent Application No. 12/391410 preparatory to obtaining Letters Patent of the United States therefore, this assignment including said application, any continuation, division or continuation-in-part thereof and/or substituted therefore, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and agree for myself and my heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment. I hereby authorize and request that any one of the attorneys or agents of **Tokyo Electron U.S. Holdings, 2400 Grove Boulevard, Austin, Texas 78741**, to insert herein the filing date and application serial number of said application when known.

Inventor's Signature: _____ Date: _____

Full Name: **Merritt Funk**
Residence: **8412 Silver Mountain Cove**
Austin, Texas 78737 USA

Inventor's Signature: 

Date: 2/19/09

Full Name: Daniel J. Prager

Residence: 89 Shagbark Lane
Hopewell Junction, New York 12533

Inventor's Signature: _____

Date: _____

Full Name: Asao Yamashita

Residence: 734 Huntington Drive
Fishkill, New York 12524 USA

Inventor's Signature: 

Date: 2/19/09

Full Name: Radha Sundararajan

Residence: 149 Catfish Cove
Dripping Springs, Texas 78620 USA