

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>Shigeki Matsunaka</td><td>03/22/2008</td></tr><tr><td>Osamu Yamazaki</td><td>03/21/2008</td></tr></tbody></table>	Name	Execution Date	Shigeki Matsunaka	03/22/2008	Osamu Yamazaki	03/21/2008			
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RECEIVING PARTY DATA									
<table border="1"><tr><td>Name:</td><td>Kabushiki Kaisha Toshiba</td></tr><tr><td>Street Address:</td><td>1-1, Shibaura 1-chome, Minato-ku</td></tr><tr><td>City:</td><td>Tokyo</td></tr><tr><td>State/Country:</td><td>JAPAN</td></tr></table>	Name:	Kabushiki Kaisha Toshiba	Street Address:	1-1, Shibaura 1-chome, Minato-ku	City:	Tokyo	State/Country:	JAPAN	
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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>11858494</td></tr></tbody></table>	Property Type	Number	Application Number:	11858494					
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CORRESPONDENCE DATA									
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Total Attachments: 2 source=ASSIGNMENT#page1.tif source=ASSIGNMENT#page2.tif									

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REEL: 020772 FRAME: 0046

ASSIGNMENT

WHEREAS, new and useful improvements have been made by the undersigned in

“MAGNETRON SPUTTERING APPARATUS AND METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE”

[] and are the subject of a patent application prepared for filing in the United States Patent and Trademark Office.

[X] for which an application for Letters Patent of the United States was filed on September 20, 2007, which application is identified by Serial No. 11/858,494.

WHEREAS, Kabushiki Kaisha Toshiba, a corporation of Japan, having a place of business at 1-1, Shibaura 1-chome, Minato-ku, Tokyo, Japan, hereinafter referred to as "assignees", are desirous of acquiring all right, title, and interest throughout the world in, to, and under said improvements and inventions and patent rights therefor.

NOW, THEREFORE, be it known that, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, all right, title, and interest, in the United States and throughout the world, in, to and under said improvements and inventions and all patents, patent applications, patent rights, and inventor's certificates thereof, therefor, and therein, including without limitation said application for patent in the United States, all divisions and continuations thereof, all patents which may be granted thereon, all reissues and extensions thereof, all right to sue for past infringement thereunder, all patents which may be granted for said improvements and inventions by states or nations other than the United States, or by other authority, entity, or organization, and all applications therefor, have been and are hereby sold, assigned, transferred, and delivered unto assignees, its successors and assigns; and it is covenanted and agreed by the undersigned, and for executors, administrators, and legal representatives of the undersigned, that at assignees' request any and all applications, affidavits,

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assignments, and other instruments will be made, executed, and delivered as may be necessary, or desirable to secure for or vest in assignees, its successors or assigns, any improvement, inventions, right, title, interest, application, patent, patent right or other right or property covered by this assignment, and the United States Commissioner of Patents and Trademarks is hereby requested and authorized to issue any and all United States patents granted on any of said applications to assignees as owners of the entire right, title, and interest in, to, and under the same, and appropriately empowered officials of foreign countries are hereby authorized to issue any letters patent granted on any of said applications to assignees as owners of the entire right, title and interest in, to, and under the same.

The undersigned hereby grants the firm of Pearne & Gordon LLP the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this assignment has been executed below by the undersigned:

(1) Inventor Name: Shigeki MATSUNAKA

Signature: Shigeki Matsunaka

Today's Date: March . 22 . 2008

Witness: _____

Witness: _____

(2) Inventor Name: Osamu YAMAZAKI

Signature: Osamu Yamazaki

Today's Date: March 21, 2008

Witness: _____

Witness: _____