PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3886204

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHINGO OHSAKI	05/23/2016
HIROSHI KARIYA	05/23/2016
TAKURO MAEDE	05/23/2016
TAKESHI KAWAMURA	05/23/2016

RECEIVING PARTY DATA

Name:	SANDISK TECHNOLOGIES LLC	
Street Address:	TWO LEGACY TOWN CENTER	
Internal Address:	6900 NORTH DALLAS PARKWAY, SUITE 325	
City:	PLANO	
State/Country:	TEXAS	
Postal Code:	75024	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15159034

CORRESPONDENCE DATA

Fax Number: (703)391-2901

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: 7033912900

Email: ptonotices@marburylaw.com

Correspondent Name: THE MARBURY LAW GROUP, PLLC Address Line 1: THE MARBURY LAW GROUP, PLLC

Address Line 2: 11800 SUNRISE VALLEY DRIVE, 15TH FLOOR

Address Line 4: RESTON, VIRGINIA 20191

ATTORNEY DOCKET NUMBER:	3590-579US
NAME OF SUBMITTER:	SOPHEAREAK C. IN
SIGNATURE:	/sopheareak c. in/
DATE SIGNED:	05/24/2016

Total Attachments: 2

PATENT REEL: 038698 FRAME: 0234 source=Assignment-4Inventors_Updated_3590-579US#page1.tif source=Assignment-4Inventors_Updated_3590-579US#page2.tif

PATENT REEL: 038698 FRAME: 0235

Attorney Docket No.: 3590-579US

ASSIGNMENT AND AGREEMENT

WHEREAS, Shingo OHSAKI, Hiroshi KARIYA, Takuro MAEDE, and Takeshi KAWAMURA, (hereinafter referred to singly and collectively as "ASSIGNOR") has invented a certain invention entitled THREE-DIMENSIONAL MEMORY DEVICE WITH ALUMINUM-CONTAINING ETCH STOP LAYER FOR BACKSIDE CONTACT STRUCTURE AND METHOD OF MAKING THEREOF for which a U.S. Non-Provisional Application Serial Number 15/159,034 was filed on May 19, 2016.

WHEREAS, SANDISK TECHNOLOGIES LLC, having its principal place of business at *Two Legacy Town Center*, 6900 North Dallas Parkway, Plano, TX 75024 (hereinafter referred to as "ASSIGNEE") is desirous of acquiring the entire interest therein;

NOW THEREFORE, in view of good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto ASSIGNEE, its successors and assigns, the full and exclusive right, title, and interest in and to (a) the above-identified invention or inventions and all improvements and modifications thereof, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto for the above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the International Convention and any other international agreement to which the United States adheres; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representatives or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

Attorney Docket No.: 3590-579US

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the law firm of **The Marbury Law Group PLLC** the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of **The Marbury Law Group PLLC** do not personally represent ASSIGNOR or ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

NAMES AND SIGNATURES OF INVENTORS				
Name: Shingo OHSAKI	Signature: Shingu Ohsaki	Date: 5/23/2016		
Name: Hiroshi KARIYA	Signature: Kariya	Date: 5/23/2016		
Name: Takuro MAEDE	Signature: Takuro Morede	Date: 5/23/2016		
Name: Takeshi KAWAMURA	Signature: Jakeshi Kawamura	Date: 5/23/2016		

Page 2 of 2