

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4317645

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
HIROYUKI OGAWA	03/13/2017
YASUO KASAGI	03/13/2017
SATOSHI SHIMIZU	03/13/2017
KAZUYO MATSUMOTO	03/13/2017
YOHEI MASAMORI	03/13/2017
JIXIN YU	03/10/2017
TONG ZHANG	03/10/2017
JAMES KAI	03/10/2017
RECEIVING PARTY DATA	
Name:	SANDISK TECHNOLOGIES LLC
Street Address:	6900 NORTH DALLAS PARKWAY
Internal Address:	SUITE 325
City:	PLANO
State/Country:	TEXAS
Postal Code:	75024
PROPERTY NUMBERS Total: 3	
Property Type	Number
Application Number:	15458269
Application Number:	62416859
Application Number:	62417575
CORRESPONDENCE DATA	
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<i>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.</i>	
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Address Line 2:	15TH FLOOR
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PATENT

ATTORNEY DOCKET NUMBER:	3590-624B
NAME OF SUBMITTER:	PATRICK MCCONVILLE
SIGNATURE:	/pmcconville/
DATE SIGNED:	03/14/2017
Total Attachments: 4 source=3590_624B_Assignment_filed#page1.tif source=3590_624B_Assignment_filed#page2.tif source=3590_624B_Assignment_filed#page3.tif source=3590_624B_Assignment_filed#page4.tif	

ASSIGNMENT AND AGREEMENT

WHEREAS, **Hiroyuki OGAWA, Yasuo KASAGI, Satoshi SHIMIZU, Kazuyo MATSUMOTO, Yohei MASAMORI, Jixin YU, Tong ZHANG, and James KAI**, (hereinafter referred to singly and collectively as "ASSIGNOR") has invented a certain invention entitled **BULB-SHAPED MEMORY STACK STRUCTURES FOR DIRECT SOURCE CONTACT IN THREE-DIMENSIONAL MEMORY DEVICE**, for which U.S. Provisional Application No. 62/416,859, was filed November 3, 2016, U.S. Provisional Application No. 62/417,575, was filed November 4, 2016, and U.S. Non-Provisional Application No. 15/458,269, was filed March 14, 2017.

WHEREAS, **SANDISK TECHNOLOGIES LLC**, having its principal place of business at **6900 NORTH DALLAS PARKWAY, SUITE 325 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.

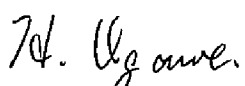
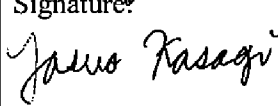

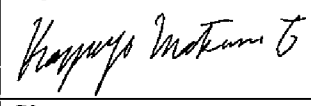
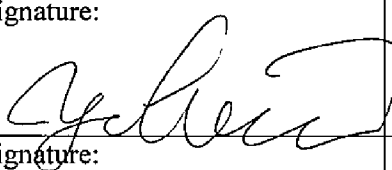
ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representatives or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, 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.

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: Hiroyuki OGAWA	Signature: 	Date: 3/13/2017
Name: Yasuo KASAGI	Signature: 	Date: 3/13/2017
Name: Satoshi SHIMIZU	Signature: 	Date: 3/13/2017
Name: Kazuyo MATSUMOTO	Signature: 	Date: 3/13/2017
Name: Yohei MASAMORI	Signature: 	Date: 3/13/2017
Name: Jixin YU	Signature:	Date:



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Name: Yasuo KASAGI	Signature:	Date:
Name: Satoshi SHIMIZU	Signature:	Date:
Name: Kazuyo MATSUMOTO	Signature:	Date:
Name: Yohei MASAMORI	Signature:	Date:
Name: Jixin YU	Signature: Ji-xin yu	Date: 3/10/2017

Name: Tong ZHANG	Signature: 	Date: 3/10/2017
Name: James KAI	Signature: 	Date: 3/10/2017