505898734 02/04/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HIROKI YABE	11/06/2019
KOICHIRO HAYASHI	11/06/2019
TAKUYA ARIKI	11/07/2019
NAOKI OOKUMA	11/12/2019
TORU MIWA	11/07/2019

RECEIVING PARTY DATA

Name:	SANDISK TECHNOLOGIES LLC	
Street Address:	5080 SPECTRUM DRIVE	
City:	ADDISON	
State/Country:	TEXAS	
Postal Code:	75001	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16681968

CORRESPONDENCE DATA

Fax Number: (248)433-7274

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Email:rmullen@dickinsonwright.comCorrespondent Name:DICKINSON WRIGHT PLLCAddress Line 1:2600 WEST BIG BEAVER ROADAddress Line 4:TROY, MICHIGAN 48084-3312

ATTORNEY DOCKET NUMBER:	CKET NUMBER: 81890-00258	
NAME OF SUBMITTER:	STEVEN C. HURLES	
SIGNATURE:	/Steven C. Hurles/	
DATE SIGNED:	02/04/2020	

Total Attachments: 2

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ASSIGNMENT

THIS ASSIGNMENT, by (1) <u>Hiroki Yabe</u> and (2) <u>Koichiro Hayashi</u> and (3) <u>Takuya Ariki</u> and (4) <u>Naoki Ookuma</u> and (5) <u>Toru Miwa</u>, with a mailing address of: <u>c/o SanDisk Technologies LLC</u>, 5080 <u>Spectrum Drive</u>, <u>Suite 1050W</u>, <u>Addison</u>, <u>Texas 75001</u>, and (hereinafter referred to as "the Assignors"), respectively witnesseth:

WHEREAS, the Assignor has invented certain new and useful improvements in

DIFFERENTIAL DBUS SCHEME FOR LOW-LATENCY RANDOM READ FOR NAND MEMORIES

set forth in an application for Letters Patent of the United States, which is a

- (1.) [X] Non-provisional application
 - (a) [X] bearing Application No. 16/681,968 and filed on November 13, 2019
 - (b) [] having an oath or declaration executed on even date herewith prior to filing of application
- (c) [] having an oath or declaration executed on a different date than this Assignment; and

WHEREAS, SanDisk Technologies LLC, a corporation duly organized under and pursuant to the laws of the United States and having a principal place of business at 5080 Spectrum Drive, Suite 1050W, Addison, Texas 75001, (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said Inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon, as well as any rights to sue for past infringement,

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sells, assigns, transfers, and sets over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and Interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assign, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owner of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel

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of the Assignee, or the counsel of its successors, legal representatives, and assign, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference, ex parte reexamination, post grant opposition (if applicable), and inter partes review proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns; but at the cost and expense of the Assignee, it successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Dickinson Wright PLLC to insert in the spaces provided above the title of the invention, filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said invention, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

DATE:	11/6/2019	Dru Cog
		Hirokí Yabe
DATE:	2019/11/6	Koichiro Hayashi Koichiro Hayashi
	,	Kolchiro Hayashi
DATE:	11/7/2019	Zahmer Arife Takuya Ariki
		· · · · · · · · · · · · · · · · · · ·
DATE:	11/12/2019	Nostri Cobuca
		Naoki Ookuma
DATE:	11/7/2019	Jon Miwa
		Toru Miwa

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RECORDED: 02/04/2020