# PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4291967

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
BRIAN W. O'KRAFKA	01/30/2017
JOHANN GEORGE	02/06/2017
VLADISLAV BOLKHOVITIN	01/30/2017
MANAVALAN KRISHNAN	01/30/2017
EVGENIY FIRSOV	02/03/2017

### RECEIVING PARTY DATA

Name:	SANDISK TECHNOLOGIES LLC
Street Address:	6900 DALLAS PARKWAY, SUITE 325
City:	PLANO
State/Country:	TEXAS
Postal Code:	75024

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15428086

### **CORRESPONDENCE DATA**

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**GARY S. WILLIAMS Correspondent Name:** 

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Address Line 2: 1400 PAGE MILL ROAD

Address Line 4: PALO ALTO, CALIFORNIA 94304

	ATTORNEY DOCKET NUMBER:	058752-01-5287-US
•	NAME OF SUBMITTER:	GARY S. WILLIAMS
<b>DATE SIGNED:</b> 02/25/2017	SIGNATURE:	/Gary S. Williams/
	DATE SIGNED:	02/25/2017

**Total Attachments: 4** 

**PATENT REEL: 041377 FRAME: 0993**  source=PLA-0150-US Assignment (5287-US)#page1.tif source=PLA-0150-US Assignment (5287-US)#page2.tif source=PLA-0150-US Assignment (5287-US)#page3.tif source=PLA-0150-US Assignment (5287-US)#page4.tif

> PATENT REEL: 041377 FRAME: 0994

## ASSIGNMENT

WHEREAS, WE, BRIAN W. O'KRAFKA, citizen of Canada, residing in Austin, TX; JOHANN GEORGE, citizen of Canada, residing in Sunnyvale, CA; VLADISLAV BOLKHOVITIN, citizen of Russian Federation, residing in San Jose, CA; MANAVALAN KRISHNAN, citizen of India, residing in Fremont, CA; and EVGENIY FIRSOV, citizen of Russia, residing in Palo Alto, CA, ASSIGNORS, are the inventors of the invention in COALESCING METADATA AND DATA WRITES VIA WRITE SERIALIZATION WITH DEVICE-LEVEL ADDRESS REMAPPING, described in an application for a Patent of the United States
<ul> <li></li></ul>
and WHEREAS, SANDISK TECHNOLOGIES LLC, ASSIGNEE, having a place of business at 6900 Dallas Parkway, Suite 325, Plano, TX 75024, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:
NOW, THEREFORE, let it be known that for and in consideration of the sum of One Dollar (\$1.00) to me paid, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and any substitute applications therefore, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; the said United States provisional patent application(s), if any, on which the said United States applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application and said United States provisional patent application(s), if any, under the Patent Laws of the United States application and said United States provisional patent application(s), if any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;
AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.
AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.
AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.
IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures
Date 1/30/17 Brian W. O'Krafka  L.S.
Date

Johann George

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## ASSIGNMENT

San citi: ME	zen of Canada, residing in Sunnyvale, CA; VLADISLAV BOLKHOVITIN, citizen of Russian Federation, residing in Jose, CA; MANAVALAN KRISHNAN, citizen of India, residing in Fremont, CA; and EVGENIY FIRSOV, zen of Russia, residing in Palo Alto, CA, ASSIGNORS, are the inventors of the invention in COALESCING ETADATA AND DATA WRITES VIA WRITE SERIALIZATION WITH DEVICE-LEVEL ADDRESS MAPPING, described in an application for a Patent of the United States
	which is executed on  even date herewith
	which is identified by Morgan, Lewis & Bockius LLP docket no. 058752-01-5287-US which was filed on, Application No
	which claims priority on U.S. Provisional Patent Application No(s). 62/298,929
$\boxtimes$	We hereby authorize and request our attorney, Gary S. Williams, of Morgan, Lewis & Bockius LLP, to insert here in parenthesis (Application number 15/428,086 , filed February 8, 2017 ) the filing date and application number of said application when known.
Sui	WHEREAS, <b>SANDISK TECHNOLOGIES LLC</b> , ASSIGNEE, having a place of business at 6900 Dallas Parkway te 325, Plano, TX 75024, is desirous of obtaining our entire right, title and interest in, to and under the said invention the said application:
ASSove and and reis Star app cou the any app cert	NOW, THEREFORE, let it be known that for and in consideration of the sum of One Dollar (\$1.00) to me paid other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we, the said SIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set or, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to a under the said invention, and the said United States application and all divisions, renewals and continuations thereof any substitute applications therefore, and all Patents of the United States which may be granted thereon and all saues and extensions thereof; the said United States provisional patent application(s), if any, on which the said United such application claims priority; and all applications for industrial property protection, including, without limitation, allocations for patents, utility models, and designs which may hereafter be filed for said invention in any country of untries foreign to the United States, together with the right to file such applications and the right to claim for the same priority rights derived from said United States application and said United States provisional patent application(s), in under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or other international agreement or the domestic laws of the country in which any such application is filed, as may be olicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors tificates and designs which may be granted for said invention in any country or countries foreign to the United States all extensions, renewals and reissues thereof;
fori	AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence of ms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its excessors, legal representatives and assigns, in accordance with the terms of this instrument.
tha	AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and we have not executed, and will not execute, any agreement in conflict herewith.
all do	AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors al representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce oper protection for said invention in all countries.
sig	IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective natures
Dat	te L.S.
	Brian W. O'Krafka

Johann George

DB2/ 30888989.1

Date February 6th, 2017

Date	11/30/17	Rosur	L.S
_		Vladislav Bolkhovitin	D.5
Date _	1/30/17	Manavalan Krishnan	L.S
Date		A TANAN ANA ANA ANA ANA ANA ANA ANA ANA	L.S.
		Fyganiy Firsov	

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# MORGAN, LEWIS & BOCKIUS LLP DOCKET NO. 058752-01-5287-US

Date	Vladislav Bolkhovitin	L.S.
Date		L.S.
Date 02/63/2017	Manavalan Krishnan  Evgeniy Firsov	1S.

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PATENT REEL: 041377 FRAME: 0998

**RECORDED: 02/25/2017**