PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SanDisk Corporation	04/04/2011

RECEIVING PARTY DATA

Name:	SanDisk Technologies Inc.			
Street Address:	6900 North Dallas Parkway			
Internal Address:	Two Legacy Town Center			
City:	Plano			
State/Country:	TEXAS			
Postal Code:	75024			

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	7889575

CORRESPONDENCE DATA

Fax Number: (408)801-9019

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 4088012863

Email: simona.benjamin@sandisk.com

Correspondent Name: SanDisk Corporation

Address Line 1: 601 Mccarthy Boulevard

Address Line 2: Patent Department/Simona Benjamin

Address Line 4: Milpitas, CALIFORNIA 95035

ATTORNEY DOCKET NUMBER: SDA-1375-US

NAME OF SUBMITTER: Simona Benjamin

Total Attachments: 5

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ASSIGNMENT

WHEREAS, SanDisk Corporation, a Delaware corporation, doing business at 601 McCarthy Boulevard, Milpitas, CA 95035 (hereinafter referred to as ASSIGNOR), holds right, title and interest throughout the world in and to the patents and patent applications set forth in the attached Exhibit A, together with all divisions, continuations, or continuations-in-part thereof, and all patents issuing thereon including reissues, renewals, substitutions, re-examinations and extensions thereof, and any and all corresponding foreign patents and patent applications (hereinafter referred to as, collectively, THE ASSIGNED PATENT RIGHTS);

WHEREAS, SanDisk Technologies Inc., a Texas corporation, doing business at Two Legacy Town Center, 6900 North Dallas Parkway, Plano, Texas 75024, (hereinafter referred to as ASSIGNEE), is desirous of acquiring the full and exclusive right, title and interest in THE ASSIGNED PATENT RIGHTS;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby assigns, transfers and conveys unto the said ASSIGNEE, and ASSIGNEE accepts, all of ASSIGNOR's right, title and interest throughout the world in and to THE ASSIGNED PATENT RIGHTS and to all Letters Patent or applications or similar legal protection, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for THE ASSIGNED PATENT RIGHTS, and to any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in the United States or a foreign country for the full term or terms for which the same may be granted, including all priority rights under the International Convention; and ASSIGNOR hereby authorizes and requests the United States Commissioner of Patents and Trademarks and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all patents for THE ASSIGNED PATENT RIGHTS to ASSIGNEE in accordance with the terms of this ASSIGNMENT but subject to reserved rights including but not limited to those previously retained by, granted to, or owned by, the United States government, educational institutions or both and hereby transfers and conveys all rights of action, power and benefit belonging to or accruing from THE ASSIGNED PATENT RIGHTS including the right to undertake proceedings to recover past and future damages and claim all other relief in respect of any acts of infringement thereof whether such acts shall have been committed before or after the date of this assignment.

No other rights, immunities, or licenses, including, without limitation, any rights to any intellectual property owned, controlled or licensable by **Assignor** are granted or assigned to ASSIGNEE under this ASSIGNMENT, either expressly or by implication, estoppel, or otherwise, other than the rights expressly recited herein.

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would knowingly conflict with this Agreement;

ASSIGNOR further covenants that ASSIGNEE will, upon its lawful request, reasonably be provided with all pertinent facts and documents relating to THE ASSIGNED PATENT RIGHTS and legal equivalents as may be known and reasonably accessible to ASSIGNOR and that ASSIGNOR will testify as to the same in any administrative contest or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce THE ASSIGNED PATENT RIGHTS and said equivalents in the United States or in any foreign country, which may be necessary or desirable to carry out the purposes thereof.

IN TESTIMONY WHEREOF, I hereunto set my hand as of the date indicated below.

SANDISK CORPORATION

Dated: 4th April 2011	- Gray Bruner
	Name: Judy Bruner Title: EVP and CFO
STATE OF California)s COUNTY OF Santa Clasa)s	
COUNTY OF Sonta Clasa)s	
On this 4 day of 4 land, 2011, b Public, personally appeared 1 land prime	efore me Area I Branzen Watan Crotany public) the undersigned Notary
within instrument and acknowledged to me th	dence to be the person(s) whose name(s) is/are subscribed to the at he/she/they executed the same in his/her/their authorized on the instrument the person(s), or the entity upon behalf of which
I certify under PENALTY OF PERJURY under the and correct.	laws of the State of California that the foregoing paragraph is true
	WITNESS my hand and official seal.
AVERIL BRANWEN WATAN Commission # 1742706 Notary Public - California Santa Clara County	Signature: Signature of Notary Public
My Comm. Expires Apr 29, 2011	We accept the Assignment
	SANDISK TECHNOLOGIES INC.
Dated: 4/4/11	Name: James F. Breysford Title: President and Sceretary
STATE OF California)s	· ·
COUNTY OF Santo Clora)s	
On this 4 day of April, 2011, b Public, personally appeared 4 AMES F. K	efore me <u>L. Benjamin</u> , the undersigned Notary
who proved to me on the basis of satisfactory evid within instrument and acknowledged to me the	dence to be the person(s) whose name(s) is/are subscribed to the at he/she/they executed the same in his/her/their authorized

capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

L. BENJAMIN Commission # 1893105 Notary Public - California Santa Clara County

WITNESS my hand and official seal.

Signature:

| Signature of Notary Public | Signature | Signature

Exhibit A

Ramamurthi, Hima Bindu Jeffrey Lutze, Yan Li Jun Wan, Yupin Fong, Man Mui Jun Wan, Yupin Fong, Man Mui Yaron Sheba, Derek Niizawa Yaron Sheba, Derek Niizawa Deepanshu Dutta, Jeffrey Lutze, Yingda Dong, Henry Chin, Toru Ishigaki	Majority Voting Logic Circuit for Dual Bus Width Programming And Selectively Erasing Non-Volatile Storage METHOD FOR SCRAMBLING DATA IN WHICH SCRAMBLING DATA AND SCRAMBLED DATA ARE STORED IN CORRESPONDING NON-VOLATILE MEMORY LOCATIONS Built-In On-Chip Data Scrambler for Non-Volatile Memory Media Player Media Player Compensating for Coupling During Read Operations	US US US US	Published Pending Published Published	12166174 12167135 12209697 12209708	1-Jul-08 2-Jul-08 12-Sep-08		
Jeffrey Lutze, Yan Li Jun Wan, Yupin Fong, Man Mui Jun Wan, Yupin Fong, Man Mui Yaron Sheba, Derek Niizawa Yaron Sheba, Derek Niizawa Deepanshu Dutta, Jeffrey Lutze, Yingda Dong, Henry Chin, Toru Ishigaki	Storage METHOD FOR SCRAMBLING DATA IN WHICH SCRAMBLING DATA AND SCRAMBLED DATA ARE STORED IN CORRESPONDING NON-VOLATILE MEMORY LOCATIONS Built-In On-Chip Data Scrambler for Non-Volatile Memory Media Player Media Player	US US US	Published Published	12209697	12-Sep-08		
Jun Wan, Yupin Fong, Man Mui Jun Wan, Yupin Fong, Man Mui Yaron Sheba, Derek Niizawa Yaron Sheba, Derek Niizawa Deepanshu Dutta, Jeffrey Lutze, Yingda Dong, Henry Chin, Toru Ishigaki	Storage METHOD FOR SCRAMBLING DATA IN WHICH SCRAMBLING DATA AND SCRAMBLED DATA ARE STORED IN CORRESPONDING NON-VOLATILE MEMORY LOCATIONS Built-In On-Chip Data Scrambler for Non-Volatile Memory Media Player Media Player	US US US	Published Published	12209697	12-Sep-08		
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Jun Wan, Yupin Fong, Man Mui Yaron Sheba, Derek Niizawa Yaron Sheba, Derek Niizawa Deepanshu Dutta, Jeffrey Lutze, Yingda Dong, Henry Chin, Toru Ishigaki	MEMORY LOCATIONS Built-In On-Chip Data Scrambler for Non-Volatile Memory Media Player Media Player	US		12209708	12-Sep-08		
Yaron Sheba, Derek Niizawa Yaron Sheba, Derek Niizawa Deepanshu Dutta, Jeffrey Lutze, Yingda Dong, Henry Chin, Toru Ishigaki	Built-In On-Chip Data Scrambler for Non-Volatile Memorv Media Player Media Player	US		12209708	12-Sep-08		
Yaron Sheba, Derek Niizawa Yaron Sheba, Derek Niizawa Deepanshu Dutta, Jeffrey Lutze, Yingda Dong, Henry Chin, Toru Ishigaki	Memorv Media Player Media Player	US		12209/08	12-Sep-08		
Yaron Sheba, Derek Niizawa Yaron Sheba, Derek Niizawa Deepanshu Dutta, Jeffrey Lutze, Yingda Dong, Henry Chin, Toru Ishigaki	Media Player Media Player					i i	
Yaron Sheba, Derek Niizawa Deepanshu Dutta, Jeffrey Lutze, Yingda Dong, Henry Chin, Toru Ishigaki	Media Player			29319349	6-Jun-08	D594874	23-Jun-09
Deepanshu Dutta, Jeffrey Lutze, Yingda Dong, Henry Chin, Toru Ishigaki	, , , , , , , , , , , , , , , , , , ,		Issued	_			
Dong, Henry Chin, Toru Ishigaki	Compensating for Coupling During Read Operations	US	Issued	29319351	6-Jun-08	D594875	23-Jun-09
		US	Issued	12188629	8-Aug-08	7876611	25-Jan-11
Macaaki Higachitani I	in Non-Volatile Storage		- 11:1				
SDA-1368-US Masaaki Higashitani	· · · · ·	US	Published	12237321	24-Sep-08		
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SDA-1370-US Mohan Vamsi Dunga, Masaaki Higashitani		05	Issued	12233950	19-Sep-08	//55946	13-Jul-10
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Albert Chang, Knin Htoo, Qui Nguyen	COEFFICIENT TRIMMING ALGORITHM						
Raul-Adrian Cernea	NON-VOLATILE MEMORY AND METHOD FOR	IIS	Issued	12347864	31-Dec-08	7813181	12-Oct-10
SDA-1372-US Raul-Adrian Cernea			133464	125 11 00 1	51 500 00	7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	12 050 10
		US	Pending	12339005	18-Dec-08		
		US	Published	12136672	10-Jun-08		
Parikh	STORAGE DEVICES						
Yuxin Wang, Feng Pan, Byungki Woo,	ON-CHIP BIAS VOLTAGE TEMPERATURE COEFFICIENT	US	Issued	12235474	22-Sep-08	7889575	15-Feb-11
Trung Pham, Khin Htoo	SELF-CALIBRATION MECHANISM						
Shih-Chung Lee, Gerrit Jan Hemink	Adaptive Erase and Soft Programming for Memory	US	Published	12899403	6-Oct-10		
Shih-Chung Lee, Gerrit Jan Hemink	Adaptive Erase and Soft Programming for Memory	US	Issued	12332646	11-Dec-08	7839690	23-Nov-10
• • • •	Semiconductor Die Support in an Offset Die Stack	US	Published	12194809	20-Aug-08		
	Drogrammang Non Volatile Storage with	LIC	Donding	12705626	24 May 10		
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- R - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	Mohan Vamsi Dunga, Masaaki Higashitani Feng Pan, Yuxin Wang, Jonathan Huynh, Albert Chang, Khin Htoo, Qui Nguyen Raul-Adrian Cernea Nima Mokhlesi Steven T. Sprouse, Henry R Hutton, Dhaval Parikh Yuxin Wang, Feng Pan, Byungki Woo, Trung Pham. Khin Htoo Shih-Chung Lee, Gerrit Jan Hemink Shih-Chung Lee, Gerrit Jan Hemink Chin-Tien Hope Chiu, Hem Takiar, JiaQing JJacki Xi Nima Mokhlesi, Henry Chin, Masaaki Higashitani Yaron Sheba Yaron Sheba Yaron Sheba Sergey Anatolievich Gorobets Raul-Adrian Cernea	Volatile Memory Arrays Mohan Vamsi Dunga, Masaaki Higashitani Data state-based temperature compensation during sensing in non-volatile memory Feng Pan, Yuxin Wang, Jonathan Huynh, Albert Chang, Khin Htoo, Qui Nguyen Raul-Adrian Cernea NON-VOLATILE MEMORY AND METHOD FOR SENSING WITH PIPELINED CORRECTIONS FOR NEIGHBORING PETTURBATIONS Nima Mokhlesi Programming Non-Volatile Storage Using Binary and Multi-State Programming Processes Steven T. 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Elip Non-Volatile Memory AND METHOD FOR RAMP- US Issued DOWN PROGRAMMING	Mohan Varnsi Dunga, Masaaki Higashitani Data state-based temperature compensation during US Issued 12233950 sensing in non-volatile memory BANDGAP VOLTAGE AND TEMPERATURE US Published 12235467 COEFFICIENT TRIMMING ALGORITHM SENSING WITH PIPELINED CORRECTIONS FOR NEIGHBRORING PERTURBATIONS Programming Non-Volatile Storage Using Binary and Multi-State Programming Processes Steven T. Sprouse, Henry R Hutton, Dhavai SWITCHABLE ACCESS STATES FOR NON-VOLATILE US Published 12339005 Multi-State Programming Processes SWITCHABLE ACCESS STATES FOR NON-VOLATILE US Published 1236672 STORAGE DEVICES ON-CHIP BIAS VOLTAGE TEMPERATURE COEFFICIENT US Issued 12235474 SELF-CALIBRATION MECHANISM Adaptive Erase and Soft Programming for Memory US Published 12899403 Schih-Chung Lee, Gerrit Jan Hemink Adaptive Erase and Soft Programming for Memory US Issued 12332646 Chin-Tien Hope Chiu, Hem Takiar, JiaQing Semiconductor Die Support in an Offset Die Stack US Published 1249809 Jack IX I. Sund Programming Non-Volatile Storage with Synchronized Coupling Synchronized Coupling (Aron Sheba Memory Card Holder US Issued 29310555 Graron Sheba Memory Card Holder US Issued 29310555 Methods and Apparatus for Passing Information to a US Pending 12190767 Host System to Suggest Logical Locations to Allocate to a File MON-VOLATILE MEMORY AND METHOD FOR RAMP- US Issued 12197955 DOWN PROGRAMMING	Volatile Memory Arravs Data state-based temperature compensation during US Issued 12233950 19-Sep-08 Sensing in non-volatile memory BANDGAP VOLTAGE AND TEMPERATURE US Published 12235467 22-Sep-08 Albert Chang, Khin Htoo, Qui Nguyen COEFFICIENT TRIMMING ALGORITHM US Issued 12347864 31-Dec-08 SENSING WITH PIPELINED CORRECTIONS FOR NIGHBORING PERTURBATIONS Programming Non-Volatile Storage Using Binary and Multi-State Programming Frocesses Steven T. Sprouse, Henry R Hutton, Dhaval SWITCHABLE ACCESS STATES FOR NON-VOLATILE US Published 12339005 18-Dec-08 Multi-State Programming Processes Steven T. Sprouse, Henry R Hutton, Dhaval SWITCHABLE ACCESS STATES FOR NON-VOLATILE US Published 1233672 10-Jun-08 Park Man, Feng Pan, Byungki Woo, On-CHIP BIAS VOLTAGE TEMPERATURE COEFFICIENT US Issued 12235474 22-Sep-08 Issued 12235474 22-Sep-08 Issued 12235474 22-Sep-08 Issued 1233666 11-Dec-08 Issue	Wohah Varnsi Dunga, Masaaki Higashitan Data state-based temperature compensation during US Issued 12233950 19-5ep-08 7755946

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