

PATENT ASSIGNMENT

Electronic Version v1.1
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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Huiwen Xu</td><td>07/01/2010</td></tr><tr><td>Er-Xuan Ping</td><td>07/12/2010</td></tr><tr><td>Xiying Costa</td><td>07/01/2010</td></tr></tbody></table>		Name	Execution Date	Huiwen Xu	07/01/2010	Er-Xuan Ping	07/12/2010	Xiying Costa	07/01/2010		
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<table border="1"><tr><td>Name:</td><td>SanDisk 3D LLC</td></tr><tr><td>Street Address:</td><td>601 McCarthy Boulevard</td></tr><tr><td>City:</td><td>Milpitas</td></tr><tr><td>State/Country:</td><td>CALIFORNIA</td></tr><tr><td>Postal Code:</td><td>95035</td></tr></table>		Name:	SanDisk 3D LLC	Street Address:	601 McCarthy Boulevard	City:	Milpitas	State/Country:	CALIFORNIA	Postal Code:	95035
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
Fax Number: (914)579-2201 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
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ATTORNEY DOCKET NUMBER:	SDMXA355-1										
NAME OF SUBMITTER:	Brian M. Dugan										
Total Attachments: 3 source=43791#page1.tif											

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PATENT
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ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1. Huiwen Xu
1461 Mallard Way
Sunnyvale, CA 94087
USA
2. Er-Xuan Ping
39541 Canyon Heights Drive
Fremont, CA 94539
USA
3. Xiyong Costa
38 North Almaden Blvd., Unit 311
San Jose, CA 95110
USA

(hereinafter referred to as Assignors), have invented a certain invention entitled:

A MEMORY CELL THAT INCLUDES A CARBON-BASED REVERSIBLE RESISTANCE SWITCHING ELEMENT COMPATIBLE WITH A STEERING ELEMENT, AND METHODS OF FORMING THE SAME

for which application for Letters Patent in the United States was filed under Serial No., executed on even date herewith; and

WHEREAS, SanDisk 3D LLC, a corporation of the State of Delaware, having a place of business at Patent Department, 601 McCarthy Boulevard, Milpitas, CA 95035 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as the Application), and the invention disclosed therein (hereinafter referred to as the Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as the Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

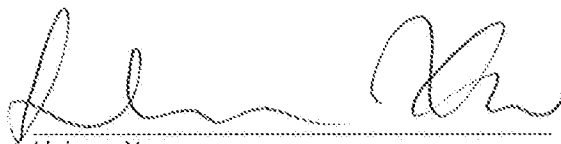
2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefor and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.

4. Said Assignors hereby warrant and represent that they have has not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

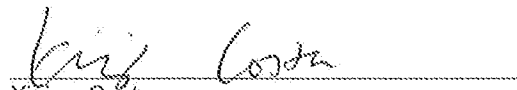
Dated: 07/01/2010


Huiwen Xu

Dated: _____

Er-Xuan Ping

Dated: 07/01/10


Xiying Costa

2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefor and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

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4. Said Assignors hereby warrant and represent that they have has not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

Dated: _____

Huiwen Xu

Dated: July 12, 2010

Er-Xuan Ping
Er-Xuan Ping

Dated: _____

Xiying Costa