

## PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
INTERMOLECULAR, INC.	06/11/2013
RECEIVING PARTY DATA	
Name:	SANDISK 3D LLC
Street Address:	951 SanDisk Boulevard
City:	Milpitas
State/Country:	CALIFORNIA
Postal Code:	95035
Name:	KABUSHIKI KAISHA TOSHIBA
Street Address:	1-1, Shibaura 1-Chome, Minato-Ku
City:	Tokyo
State/Country:	JAPAN
Postal Code:	105
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	13223950
CORRESPONDENCE DATA	
Fax Number:	9145792201
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	(914) 579-2200
Email:	duganemail@duganpatent.com
Correspondent Name:	Brian M. Dugan, Dugan & Dugan, P.C.
Address Line 1:	245 Saw Mill River Rd. - Suite 309
Address Line 4:	Hawthorne, NEW YORK 10532
ATTORNEY DOCKET NUMBER:	SD-IMA-001-US

OP \$40.00 13223950

NAME OF SUBMITTER:	Brian M. Dugan
Signature:	/Brian M. Dugan/
Date:	06/14/2013
<b>Total Attachments: 5</b> source=IMA DEED OF PATENT ASSIGNMENT#page1.tif source=IMA DEED OF PATENT ASSIGNMENT#page2.tif source=IMA DEED OF PATENT ASSIGNMENT#page3.tif source=IMA DEED OF PATENT ASSIGNMENT#page4.tif source=IMA DEED OF PATENT ASSIGNMENT#page5.tif	

## **DEED OF PATENT ASSIGNMENT**

This Patent Assignment ("Agreement") is entered into this 4th day of June 2013 ("Effective Date"), by INTERMOLECULAR, INC., a Delaware corporation having an address at 3011 N. First Street, San Jose, California 95134 ("Assignor") to assign Assignor's entire right title and interest in and to the Assigned Patent Rights (defined below) to SANDISK 3D LLC, a Delaware corporation having an address at 951 SanDisk Boulevard, Milpitas, California 95035 (together with any successors, legal representatives of assigns thereof) (collectively referred to herein as "SANDISK") and KABUSHIKI KAISHA TOSHIBA, a Japanese corporation having an address at 1-1, Shibaura 1-Chome, Minato-Ku, Tokyo 105, Japan (together with any successors, legal representatives of assigns thereof) (collectively referred to herein as "TOSHIBA"). SANDISK AND TOSHIBA are collectively referred to herein as "Assignees."

WHEREAS, Assignor owns the entire right, title and interest in and to the Assigned Patent Rights (as defined below);

AND WHEREAS Assignees want to acquire the entire right, title and interest in and to the Assigned Patent Rights;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, Assignor has sold, assigned and transferred, and does hereby sell, assign and transfer to Assignees the entire right, title and interest in and to the Assigned Patent Rights across all territories, provinces, or states of all countries;

Assignor empowers Assignees, their successors, assigns and nominees, to make applications for patent registration or protection anywhere in the world, to claim and receive the benefit of any applicable rights of priority in connection with such applications, to prosecute such applications to issue, and to have any and all registrations issued in Assignees' names, and the right to sue or bring other actions for past, present and future infringement;

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 improvements to Assignees in accordance with the terms of this assignment; and

Assignor hereby covenants and agrees that Assignor will communicate to Assignees any facts known to Assignor respecting the Assigned Patent Rights, and will testify in any legal proceeding, sign all lawful papers, execute all documentation necessary to file, prosecute, or perfect the assignment or ownership of the Assigned Patent Rights, including, without limitation documentation for any inventor's certificates, or divisional, continuing, reissue, design, or model patents or patent applications in any country, and all extensions, renewals, reissues, and reexaminations thereof, make all rightful oaths, and generally do everything possible to aid Assignees to obtain and enforce proper protection for the Assigned Patent Rights in all countries.

As used in this Agreement, "Assigned Patent Rights" means: (a) the patent applications set forth on Schedule 1 hereto ("Listed Patent Applications"); and (b) any and all other patents and patent applications that claim priority from any of the Listed Patent Applications, including, without limitation any and all reexaminations, extensions, reissues, divisionals, renewals,

provisionals, substitutions, continuations and continuations-in-part patents or patent applications in all countries.

IN TESTIMONY WHEREOF, Assignor, by its duly authorized representative, hereby executes this assignment.

**Assignor:** INTERMOLECULAR, INC.  
By: \_\_\_\_\_  
Name: Sandeep Jaggi  
Title: General Counsel & Sr. VP of IP  
Date: 6/11/2013

IN TESTIMONY WHEREOF, Assignees, by their duly authorized representatives, hereby execute this assignment.

**Assignee:** SANDISK 3D LLC  
By: \_\_\_\_\_  
Name: E. Earle Thompson  
Title: VP, Chief IP Counsel  
Date: \_\_\_\_\_

**Assignee:** KABUSHIKI KAISHA TOSHIBA  
By: \_\_\_\_\_  
Name: Hiroshi Miyauchi  
Title: General Manager, Intellectual Property Division  
Date: \_\_\_\_\_

provisionals, substitutions, continuations and continuations-in-part patents or patent applications in all countries.

IN TESTIMONY WHEREOF, Assignor, by its duly authorized representative, hereby executes this assignment.

**Assignor:** INTERMOLECULAR, INC.

By: \_\_\_\_\_

Name: Sandeep Jaggi

Title: General Counsel & Sr. VP of IP

Date: \_\_\_\_\_

IN TESTIMONY WHEREOF, Assignees, by their duly authorized representatives, hereby execute this assignment.

**Assignee:** SANDISK 3D LLC  
By SanDisk Technologies Inc. as its sole member

By:  \_\_\_\_\_

Name: Garth Bossow

Title: Director

Date: June 11, 2013

**Assignee:** KABUSHIKI KAISHA TOSHIBA

By: \_\_\_\_\_

Name: Hiroshi Miyauchi

Title: General Manager, Intellectual Property Division

Date: \_\_\_\_\_

provisionals, substitutions, continuations and continuations-in-part patents or patent applications in all countries.

IN TESTIMONY WHEREOF, Assignor, by its duly authorized representative, hereby executes this assignment.

**Assignor:** INTERMOLECULAR, INC.

By: \_\_\_\_\_

Name: Sandeep Jaggi

Title: General Counsel & Sr. VP of IP

Date: \_\_\_\_\_

IN TESTIMONY WHEREOF, Assignees, by their duly authorized representatives, hereby execute this assignment.

**Assignee:** SANDISK 3D LLC

By: \_\_\_\_\_

Name: E. Earle Thompson

Title: VP, Chief IP Counsel

Date: \_\_\_\_\_

**Assignee:** KABUSHIKI KAISHA TOSHIBA

By: 

Name: Hiroshi Miyauchi

Title: General Manager, Intellectual Property Division

Date: June 4, 2013

**SCHEDULE 1  
LISTED PATENT APPLICATIONS**

Country	Serial No.	Filing Date	Title
US	13/223,950	9/1/2011	DEFECT GRADIENT TO BOOST NONVOLATILE MEMORY PERFORMANCE
US	13/228,744	9/9/2011	INTERFACE LAYER IMPROVEMENTS FOR NONVOLATILE MEMORY APPLICATIONS
US	13/309,813	12/2/2011	NONVOLATILE RESISTIVE MEMORY ELEMENT WITH A PASSIVATED SWITCHING LAYER
US	13/354,006	1/19/2012	NONVOLATILE MEMORY DEVICE USING A TUNNEL OXIDE AS A CURRENT LIMITER ELEMENT
US	13/399,815	2/17/2012	LIMITING RERAM LEAKAGE CURRENT USING VARISTOR AS PASSIVE CURRENT STEERING ELEMENT
US	13/399,530	2/17/2012	A CURRENT-LIMITING LAYER AND A LOW VOLTAGE SWITCHING LAYER TO FORM A MEMORY DEVICE
WO	PCT/US2012/066398	11/21/2012	NONVOLATILE RESISTIVE MEMORY ELEMENT WITH A PASSIVATED SWITCHING LAYER
WO	PCT/US2013/022242	1/18/2013	NONVOLATILE MEMORY DEVICE USING A TUNNEL OXIDE AS A CURRENT LIMITER ELEMENT