PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Haiwen Xi	07/07/2008
Ming Sun	07/07/2008
Dexin Wang	07/07/2008
Shuiyuan Huang	07/07/2008
Michael Tang	07/07/2008
Song S. Xue	07/03/2008

RECEIVING PARTY DATA

Name:	SEAGATE TECHNOLOGY LLC
Street Address:	920 Disc Drive
City:	Scotts Valley
State/Country:	CALIFORNIA
Postal Code:	95066

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12170519

CORRESPONDENCE DATA

Fax Number: (651)259-6701

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

Phone: 651.259.6705

Email: dlagro@cnwiplaw.com

Correspondent Name: Mara DeBoe

408 St. Peter Street Address Line 1:

Address Line 2: Suite 240

Address Line 4: St. Paul, MINNESOTA 55102

ATTORNEY DOCKET NUMBER: 1011.14156.00

PATENT

500588925 **REEL: 021218 FRAME: 0874**

NAME OF SUBMITTER: Mara E. DeBoe Total Attachments: 6 source=2008-07-08-Signed_Assignment_14156#page1.tif source=2008-07-08-Signed_Assignment_14156#page2.tif

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PATENT REEL: 021218 FRAME: 0875

ASSIGNMENT

WHEREAS, WE,

- (1) <u>Haiwen Xi</u>, residing at 3019 Bobcat Trail NW, Prior Lake, Minnesota 55372;
- (2) Ming Sun, residing at 9145 Belvedere Drive, Eden Prairie, Minnesota 55347;
- (3) <u>Dexin Wang</u>, residing at 18780 Pathfinder Drive, Eden Prairie, Minnesota 55347:
- (4) Shuiyuan Huang, residing at 15244 Dunlin Court, Apple Valley, Minnesota 55124;
- (5) Michael Tang, residing at 7850 W. 95th Street, Bloomington, Minnesota 55438; and
- (5) Song S. Xue, residing at 5712 Continental Drive, Edina, Minnesota 55436,

have invented certain improvements in PROGRAMMABLE METALLIZATION MEMORY CELLS VIA SELECTIVE CHANNEL FORMING for which We have executed an application for Letters Patent of United States of America,

- is attached hereto.
- was filed on July 10, Z.008 as United States Application No. 12/170519; and

WHEREAS We hereby authorize and request the Assignee, Seagate Technology LLC, to insert the filing date and application number of said application when known; and

WHEREAS, Seagate Technology LLC, a corporation organized and existing under the laws of the State of Delaware and having a principal place of business at 920 Disc Drive, Scotts Valley, California 95066, hereinafter referred to as "Corporation," is desirous of acquiring the entire right, title and interest in and to said invention for the United States and for all foreign countries and in and to any and all foreign and domestic Letters Patent which may be granted therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged. We have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Corporation, its successors and assigns, the entire right, title and interest in and to said invention and the entire right, title and interest in and to any and all Letters Patent of the United States (including, without limitation, every patent application identified above) and any foreign countries which may be granted therefor including my rights under the International Convention for the Protection of Industrial Property, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Letters Patent that may be granted, the same to be held and enjoyed by Corporation for its own use and benefit and use and benefit of its successors and assigns to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made;

AND, for the consideration aforesaid, we materially represent to Corporation, its successors and assigns, that at the time of the execution and delivery of these presents, We are the lawful owners of the entire right, title and interest in and to the invention, application and Letters Patent above mentioned, and that the same are unencumbered, and that we have good right and lawful authority to sell and convey the same in the manner herein set forth;

AND, for the consideration aforesaid, we hereby individually covenant and agree to and with Corporation, its successors and assigns, that whenever its counsel or the counsel of its successors or assigns, learned in the law, shall advise that an amendment or division of, or continuation or any continuation-in-part thereof, or any other proceeding in connection with the filing or prosecution of said domestic or foreign patent applications, including interference proceedings, is lawful and desirable, or that a reissue of extension of said Letters Patent is lawful and desirable, we, or my executors, administrators or assigns will sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for the procurement of valid Letters Patent for said invention, or for the reissue or extension of the same, without charge to Corporation, its successors or assigns, but at Corporation's expense.

We hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Corporation in accordance with this instrument.

Taken to Corporation in accordance with this institution.
IN WITNESS WHEREOF, We have hereunto set my hand on this
<u>Haiwen Xi</u>
STATE OF MINNESOTA)
COUNTY OF Henvelin) ss.
On this 7th day of 5u/y, 2008 before me personally appeared Haiwen
\underline{Xi} , to me known to be the person described \underline{I} n and who executed the foregoing instrument and
acknowledged that he executed the same as his free act and deed.
IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.
Tersa Marie Feldstein
TERESA MARIE FELDSTEIN Notary Public
NOTARY PUBLIC
MINNESOTA R
My Commission Expires Jan. 31, 2011

[SEAL]

IN WITNESS WHEREOF, We have her	eunto set my hand on this day of
- U	Ming Sun
STATE OF MINNESOTA) ss. COUNTY OF Hempfin On this	
IN WITNESS WHEREOF, I have hereu the day and year above written. TERESA MARIE FELDSTEIN NOTARY PUBLIC MINNESOTA My Commission Expires Jan. 31, 2011	Teresa Marie Teldstein Notary Public
[SEAL]	
IN WITNESS WHEREOF, I have hereu, 2008.	nto set my hand on this

STATE OF MINNESOTA) COUNTY OF HUMPHIA) ss.
On this day of
IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.
TERESA MARIE FELDSTEIN JOHN Manie Jeld Stew
MINNESOTA NOME PRODUCTION
My Commission Expires Jan. 31, 2011
[SEAL]
IN WITNESS WHEREOF, I have hereunto set my hand on this 7th day of July , 2008.
Shuiyuan Huang
STATE OF MINNESOTA)
COUNTY OF HEAMEDIA) ss.
On this

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.
TERESA MARIE FELDSTEIN NOTARY PUBLIC MINNESOTA My Commission Expires Jan. 31, 2011 [SEAL]
IN WITNESS WHEREOF, I have hereunto set my hand on this 74 day of 2008.
Michael Tang
STATE OF MINNESOTA)
COUNTY OF HENNEPIN)
On this 74 day of 74 day of 2008, before me personally appeared Michael Tang, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.
IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.
TERESA MARIE FELDSTEIN NOTARY PUBLIC MINNESOTA My Commission Expires Jan. 31, 2011
[SEAL]

IN WITNESS WHEREOF, I have hereunto set my hand on this 3rd day of
Song S. Xue
STATE OF MINNESOTA)
COUNTY OF HEARTH) ss.
On this 34 day of July 2008, before me personally appeared Song S. Xue, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.
IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office,
the day and year above written. Teresa Marie Jeld Heir
TERESA MARIE FELDSTEIN NOTARY PUBLIC MINNESOTA My Commission Expires Jan. 31, 2011
[SEAL]

This is the final page of this Assignment.

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