503226116 03/19/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3272733

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BIN LU	05/31/2011
QING HE	06/03/2011
MARK COVINGTON	06/03/2011
YUNHAO XU	05/31/2011
WEI TIAN	06/03/2011

RECEIVING PARTY DATA

Name:	SEAGATE TECHNOLOGY LLC
Street Address:	10200 S. DEANZA BOULEVARD
City:	CUPERTINO
State/Country:	CALIFORNIA
Postal Code:	95014

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14568645

CORRESPONDENCE DATA

Fax Number: (612)305-1228

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 6123051005

Email: dlagro@mrgiplaw.com ANNA M. NELSON **Correspondent Name:**

Address Line 1: 111 THIRD AVENUE SOUTH

Address Line 2: SUITE 350

Address Line 4: MINNEAPOLIS, MINNESOTA 55401

ATTORNEY DOCKET NUMBER:	430.16309011
NAME OF SUBMITTER:	ANNA M. NELSON
SIGNATURE:	/Anna M. Nelson/
DATE SIGNED:	03/19/2015
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Total Attachments: 4

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PATENT REEL: 035204 FRAME: 0185

ASSIGNMENT

Seagate Docket No.:

STL 16309

WHEREAS, I/we Bin Lu of 1186 Bellingham Square, San Ramon, CA 94582 and Qing He of 3845 Black Oaks Lane North, Plymouth, MN 55446 and Mark Covington of 5916 Abbott Avenue South, Edina, MN 55410 and Yunhao Xu of 4737 Valpey Park Avenue, Fremont, CA 94538 and Wei Tian of 4101 West 98th Street, Apt. 202, Bloomington, MN 55437, are the inventor(s) of an invention entitled TUNNELING MAGNETO-RESISTIVE SENSORS WITH BUFFER LAYERS that is the subject matter of: (check all that apply)

□ a provisional application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Application No. ________ filed on _______;
□ an application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Application No. _______ filed on _______; filed on _______; an international application for Letters Patent filed pursuant to the Patent Cooperation Treaty which is identifiable in the United States Receiving Office by Application No. ______ filed on _______ filed on ________ filed on ________ filed on _______ filed on _______ filed on ________ filed on _________ filed on __________ filed on __________ filed on __________ filed on ______________ filed on _______________ filed on _________

WHEREAS, Seagate Technology LLC, a limited liability company organized and existing under the laws of the State of Delaware and the United States of America, and having offices at 920 Disc Drive, Scotts Valley, California, 95066 USA, ("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the applications, and any and all Letters Patent or similar foreign or domestic legal protection;

; and/or executed on even date herewith:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/we transfer to Assignee, its successors and assigns, my/our entire right, title and interest in and to the invention, the above-identified applications, all provisional applications from which any of the above-identified applications claim priority, corresponding domestic and foreign applications, any continuation, division, renewal, or substitute for the applications, all Letters Patent, any reissue, re-examination, or similar legal protection issuing related to the Letters Patent, and all rights and benefits under any applicable treaty or convention; and I/we authorize the Director of the United States Patent and Trademark Office or foreign equivalent to issue the Letters Patent or similar legal protection to the Assignee.

I/We authorize the Assignee, its successors and assigns, to insert in this instrument the filing date(s) and application numbers when ascertained. I/We further authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries and appoint Assignee the common representative in the above identified international application and any international application for the invention.

I/We represent to the Assignee, its successors and assigns, that I/we have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I/We, my/our executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute and deliver to Assignee or its legal representatives such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries, including without limitation providing testimony in any related interference, litigation or proceeding.

PATENT Rev: 03-07-2011

REEL: 035204 FRAME: 0186

4	Bin Lu	5-31-2011
		Date
State of CALIFORNIA		
County of ALAMEDA)		
On MAY 31,2011 before me, DAPINTS	PL PHAGENT	H, NOTARY PUBLIC
(insert name and titl	e of the officer)
personally appeared <u>BIN LUE</u> (Inventor), who proved to me name is subscribed to the within instrument and acknowledge capacity, and that by his/her signature on the instrument the executed the instrument.	ed to me that he/sh	executed the same in his/her authorized
I certify under PENALTY OF PERJURY under the laws of the paragraph is true and correct.	State ofCALL	FOPNIA_that the foregoing
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- U.S. Assignment - Seagate Technology LLC	-2-	DATENT

PATENT PATENT REEL: 035204 FRAME: 0187

Signature	(Seal)
Signature of Notary Public	
	Mark Covington 1
	Date (2/3///
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nerennally anneared MARK COVINGTON (Inven	tor), who proved to me on the basis of satisfactory evidence to be the person
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	MELISSA ANN ZARNS
MARINA	2 8-00" NOW
Samuel YV EUSA TANNA	(Seal) NOTARY PUBLIC - min Jan. 31, 2012 § My Commission Expires Jan. 31, 2012 §
Signature Signature of Notary Public	(near)
	Yunhao Xu
	5/31/2011
State of CALIFORNIA	Date
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personally appeared <u>WEI TIAN</u> (Inventor), who proved to me on name is subscribed to the within instrument and acknowledged is capacity, and that by his/her signature on the instrument the per executed the instrument. I certify under PENALTY OF PERJURY under the laws of the St paragraph is true and correct.	o me that he/she executed the same in his/her authorized son, or the entity upon behalf of which the person acted,
WITNESS my hand and official seal.	
Signature Signature of Notary Public (Seal)	MELISSA ANN ZARNS MELISSA ANN ZARNS NOTARY PUBLIC - MINNESOTA My Commission Expires Jan. 31, 2012 My Commission Expires Jan. 31, 2012