

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Dongming Liu	02/02/2011
Lin Zhou	02/02/2011
Adam K. Himes	02/15/2011
Lee C. Knippenberg	02/02/2011
Michael T. Johnson	02/02/2011
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Seagate Technology LLC
<b>Street Address:</b>	920 Disc Drive
<b>City:</b>	Scotts Valley
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95066
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	13036184
<b>CORRESPONDENCE DATA</b>	
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<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
<b>Phone:</b>	612-334-3222
<b>Email:</b>	tsorbel@wck.com
<b>Correspondent Name:</b>	Leanne Taveggia Farrell
<b>Address Line 1:</b>	900 Second Avenue South, Suite 1400
<b>Address Line 4:</b>	Minneapolis, MINNESOTA 55402
<b>ATTORNEY DOCKET NUMBER:</b>	S01.12-1400/STL 16027 LTF
<b>NAME OF SUBMITTER:</b>	Theresa R. Sorbel

OP \$40.00 13036184

Total Attachments: 4

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## ASSIGNMENT

Attorney Docket No. : S01.12-1400  
Seagate Docket No. : STL 16027

WHEREAS, We, Dongming Liu of 17946 Strawberry Ct, Eden Prairie, Minnesota, 55347, USA; Lin Zhou of 4623 Weston Hill Drive, Eagan, Minnesota, 55123, USA; Adam K. Himes of 11705 38<sup>th</sup> Avenue North, Minneapolis, MN 55441; Lee C. Knippenberg of 13104 Lakeview Drive, Burnsville, MN 55337 and Michael T. Johnson of 4841 Drew Avenue South, Minneapolis, MN 55410, are the inventor(s) of an invention entitled CONTACT DETECTION 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. 13/036,184 filed on February 28, 2011, and/or executed on even date herewith; and
- 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 \_\_\_\_\_; and/or executed on even date herewith:

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;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, we transfer to Assignee, its successors and assigns, 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 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.

We authorize the Assignee, its successors and assigns, to insert in this instrument the filing date(s) and application numbers when ascertained. 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.

We represent to the Assignee, its successors and assigns, that we have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. We, 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.

[Signature]  
Dongming Liu (Inventor)

State of Minnesota )  
County of Hennepin )

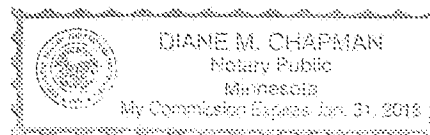
On February 2<sup>nd</sup>, 2011 before me, Diane M. Chapman  
(insert name and title of the officer)

personally appeared Dongming Liu (Inventor), who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature Diane M. Chapman (Seal)  
Signature of Notary Public



[Signature]  
Lin Zhou (inventor)

State of Minnesota )  
County of Hennepin )

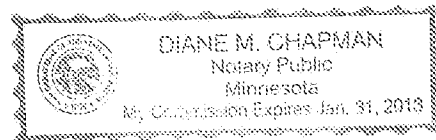
On February 2<sup>nd</sup>, 2011 before me, Diane M. Chapman  
(insert name and title of the officer)

personally appeared Lin Zhou (Inventor), who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature Diane M. Chapman (Seal)  
Signature of Notary Public



*Adam K. Himes*  
Adam K. Himes (Inventor)

State of Minnesota )  
County of Ramsey )

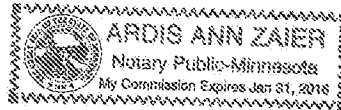
On February 15, 2011 before me, Ardis Ann Zaier  
(insert name and title of the officer)

personally appeared Adam Himes (inventor), who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature *Ardis Ann Zaier* (Seal)  
Signature of Notary Public



*Lee C. Knippenberg*  
Lee C. Knippenberg (Inventor)

State of Minnesota )  
County of  Hennepin )

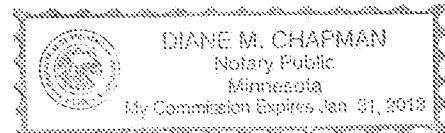
On February 22nd, 2011 before me, Diane M. Chapman  
(insert name and title of the officer)

personally appeared Lee C. Knippenberg (inventor), who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature *Diane M. Chapman* (Seal)  
Signature of Notary Public



Michael T. Johnson  
Michael T. Johnson (Inventor)

State of Minnesota )  
County of Hennepin )

On February 2nd, 2011 before me, Diane M. Chapman  
(insert name and title of the officer)

personally appeared Michael T. Johnson (Inventor), who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature Diane M. Chapman (Seal)  
Signature of Notary Public

