

## 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>Lin Zhou</td><td>05/09/2011</td></tr><tr><td>Huazhou Lou</td><td>05/13/2011</td></tr><tr><td>Dongming Liu</td><td>05/13/2011</td></tr><tr><td>Vincent B. Engelkes</td><td>05/13/2011</td></tr></tbody></table>	Name	Execution Date	Lin Zhou	05/09/2011	Huazhou Lou	05/13/2011	Dongming Liu	05/13/2011	Vincent B. Engelkes	05/13/2011	
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Vincent B. Engelkes	05/13/2011										
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											
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>13117969</td></tr></tbody></table>	Property Type	Number	Application Number:	13117969							
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CORRESPONDENCE DATA											
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ATTORNEY DOCKET NUMBER:	STL16747										
NAME OF SUBMITTER:	Randall K. McCarthy										
Total Attachments: 3 source=2011-05-27-Assignment-STL16747#page1.tif source=2011-05-27-Assignment-STL16747#page2.tif source=2011-05-27-Assignment-STL16747#page3.tif											

OP \$40.00 13117969

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PATENT  
REEL: 026355 FRAME: 0601

## ASSIGNMENT

Seagate Docket No. :

STL16747

WHEREAS, I/we Lin Zhou of 4623 Weston Hills Drive, Eagan, MN 55123, Huazhou Lou of 11434 Kensington Drive, Eden Prairie, MN 55347, Dongming Liu of 17946 Strawberry Ct., Eden Prairie, MN 55347, and Vincent B. Engelkes of 8756 Sycamore Lane, N., Maple Grove, MN 55369 are the inventor(s) of an invention entitled TRIBOLOGICAL MONITORING OF A DATA STORAGE DEVICE 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 \_\_\_\_\_ 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, 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.

Lin Zhou  
Lin Zhou (Inventor)  
Date 5/9/2011

State of MN

County of Scott

On May 9<sup>th</sup> before me, MICHELLE KOLLASCH  
(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 that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature Michelle Kollasch (Seal)  
Signature of Notary Public

Huazhou Lou  
Huazhou Lou (Inventor)  
Date 5/13/11

State of MN

County of Hennepin

On May 13, 2011 before me, Diane M. Chapman  
(insert name and title of the officer)

personally appeared Huazhou Lou (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 that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



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

Dongming Liu  
Dongming Liu (Inventor)  
Date 5/13/11

State of MN

County of Hennepin

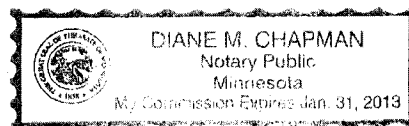
On May 13, 2011 before me, Diane M. Chapman  
(insert name and title of the officer)

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 that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

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



Vincent B. Engelkes  
Vincent B. Engelkes (Inventor)  
Date 5/13/11

State of MN

County of Hennepin

On May 13, 2011 before me, Diane M. Chapman  
(insert name and title of the officer)

personally appeared Vincent Engelkes (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.

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

