

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4013083

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SHAOPING LI	07/28/2016
GERARDO A. BERTERO	07/27/2016
MING MAO	07/27/2016
SHIHAI HE	07/27/2016
STEVEN C. RUDY	07/28/2016
HAIWEN XI	08/03/2016
JIANXIN FANG	07/29/2016
ZHIHONG ZHANG	08/01/2016
YINGBO ZHANG	08/01/2016
QUNWEN LENG	08/02/2016
ZHIPENG LI	07/28/2016
HAIFENG WANG	07/28/2016
CHRISTOPHER L. BEAUDRY	07/28/2016
RUI SHENG LIU	07/28/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	WESTERN DIGITAL (FREMONT), LLC
<b>Street Address:</b>	44100 OSGOOD ROAD
<b>City:</b>	FREMONT
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94539
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15240311
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(650)318-3370
<i>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.</i>	
<b>Phone:</b>	650-318-3374
<b>Email:</b>	patents@convergentlaw.com

<b>Correspondent Name:</b>	CONVERGENT LAW GROUP LLP
<b>Address Line 1:</b>	475 N. WHISMAN ROAD, SUITE 400
<b>Address Line 4:</b>	MOUNTAIN VIEW, CALIFORNIA 94043

<b>ATTORNEY DOCKET NUMBER:</b>	W20161056-PRI-US-1
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<b>NAME OF SUBMITTER:</b>	DEBBIE NISHIHARA
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<b>SIGNATURE:</b>	/DebbieNishihara/
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<b>DATE SIGNED:</b>	08/18/2016
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**Total Attachments: 4**

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**ASSIGNMENT**

Whereas, we, **SHAOPING LI**, residing at **San Ramon, California**; **GERARDO A. BERTERO**, residing at **Redwood City, California**; **MING MAO**, residing at **Dublin, California**; **SHIHAI HE**, residing at **Fremont, California**; **STEVEN C. RUDY**, residing at **Carmel Valley, California**; **HAIWEN XI**, residing at **San Jose, California**; **ZHIPENG LI**, residing at **Fremont, California**; **HAIFENG WANG**, residing at **San Jose, California**; **JIANXIN FANG**, residing at **San Jose, California**; **ZHIHONG ZHANG**, residing at **Fremont, California**; **YINGBO ZHANG**, residing at **San Ramon, California**; **QUNWEN LENG**, residing at **Palo Alto, California**; **CHRISTOPHER L. BEAUDRY**, residing at **San Jose, California**; and **RUI SHENG LIU**, residing at **San Jose, California**, have invented certain new and useful improvements in **READ SENSOR HAVING AN INSULATING LAYER CAPABLE OF USE IN TWO-DIMENSIONAL MAGNETIC RECORDING** (hereafter "Improvements") for which we have executed an application for a United States Patent filed **HEREWITH**, Application No. **UNKNOWN** (hereafter "Application"); and

Whereas, **Western Digital (Fremont), LLC** (hereafter "Assignee"), a Delaware limited liability company, desires to acquire the entire right, title, and interest in and to the Improvements and the Application.

Now, therefore, that for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the Assignee, its successors, legal representatives and assignees, the entire right, title, and interest throughout the world in, to and under the Improvements, and the Application and all provisionals, divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereof and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for the Improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patents for the Improvements to the Assignee, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

We hereby covenant and agree that we will communicate to the Assignee, its successors, legal representatives and assigns, any facts known to us respecting the Improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and aid the Assignee, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Improvements in all countries.

This agreement shall be deemed to have been executed and delivered within the State of California, and the rights and obligations of the parties hereunder shall be construed and enforced in accordance with, and governed by, the laws of the State of California without regard to any principles of conflict of laws that would result in the application of the laws of any other jurisdiction. In the event a judicial proceeding is necessary, the exclusive forums for resolving disputes arising under or relating to this agreement shall be the state and federal courts located within the County of Orange, California, and all related appellate courts and the parties hereby consent to the exclusive jurisdiction of such courts, and hereby waive any and all objections based on venue or forum non conveniens.

Title of Invention: **READ SENSOR HAVING AN INSULATING LAYER CAPABLE OF USE IN TWO-DIMENSIONAL MAGNETIC RECORDING**

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The parties agree that this agreement may be electronically signed. The parties agree that the electronic signatures appearing on this agreement are the same as handwritten signatures for the purposes of validity, enforceability and admissibility.

/Shaoping Li/  
(Shaoping Li (Jul 28, 2016))

SHAOPING LI

JIANXIN FANG

/Gerardo A. Bertero/  
(Gerardo A. Bertero (Jul 27, 2016))

GERARDO A. BERTERO

ZHIHONG ZHANG

/Ming mao/  
(ming mao (Jul 27, 2016))

MING MAO

YINGBO ZHANG

/Shihai He/  
(Shihai He (Jul 27, 2016))

SHIHAI HE

QUNWEN LENG

/Steven C. Rudy/  
(Steven C. Rudy (Jul 28, 2016))

STEVEN C. RUDY

CHRISTOPHER L. BEAUDRY

/Huiwen Xi/  
(Huiwen Xi (Aug 3, 2016))

HAIWEN XI

RUISHENG LIU

ZHIPENG LI

HAIFENG WANG

Title of Invention: **READ SENSOR HAVING AN INSULATING LAYER CAPABLE OF USE IN TWO-DIMENSIONAL MAGNETIC RECORDING**

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SHAOPING LI

/Jiaoxin Fang/  
Jiaoxin Fang (Jul 29, 2016)  
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JIANXIN FANG

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GERARDO A. BERTERO

/Zhihong Zhang/  
Zhang Zhang (Jul 1, 2016)  
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ZHIHONG ZHANG

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MING MAO

/zhang yingbo/  
Zhang yingbo (Aug 7, 2016)  
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YINGBO ZHANG

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SHIHAI HE

QUNWEN LENG  
QUNWEN LENG (Aug 2, 2016)  
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QUNWEN LENG

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STEVEN C. RUDY

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CHRISTOPHER L. BEAUDRY

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HAIWEN XI

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RUIHENG LIU

/zhipe ng Li/  
zhipe ng Li (Jul 28, 2016)  
\_\_\_\_\_  
ZHIPENG LI

/Haifeng Wang/  
Haifeng Wang (Jul 28, 2016)  
\_\_\_\_\_  
HAIFENG WANG

Title of Invention: **READ SENSOR HAVING AN INSULATING LAYER CAPABLE OF USE IN TWO-DIMENSIONAL MAGNETIC RECORDING**

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SHAOPING LI

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JIANXIN FANG

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GERARDO A. BERTERO

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ZHIHONG ZHANG

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MING MAO

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YINGBO ZHANG

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SHIHAI HE

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QUNWEN LENG

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STEVEN C. RUDY

  
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CHRISTOPHER L. BEAUDRY

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HAIWEN XI

  
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RUIHENG LIU

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ZHIPENG LI

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HAIFENG WANG