## 503570255 11/16/2015

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

rsion v1.1 EPAS ID: PAT3616882

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ZHOU YONG	11/02/2015
JIE WAN	10/22/2015
SHUYU CAO	10/22/2015
JIANGHONG DING	10/21/2015
JERN KHANG TAN	11/14/2015

#### RECEIVING PARTY DATA

Name:	WESTERN DIGITAL TECHNOLOGIES, INC.
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City:	IRVINE
State/Country:	CALIFORNIA
Postal Code:	92612

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14582123

### **CORRESPONDENCE DATA**

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Total Attackments C	
DATE SIGNED:	11/16/2015
SIGNATURE:	/Paulette Halili/
NAME OF SUBMITTER:	PAULETTE HALILI
ATTORNEY DOCKET NUMBER:	T7337

Total Attachments: 6

PATENT REEL: 037045 FRAME: 0729



PATENT REEL: 037045 FRAME: 0730

Atty. Docket No.: T7337

#### ASSIGNMENT

Whereas, we, ZHOU YONG, a citizen of China, residing at NINGBO, China; JIE WAN, a citizen of China, residing at SINGAPORE, Singapore; SHUYU CAO, a citizen of Singapore, residing at SINGAPORE, Singapore; JIANGHONG DING, a citizen of China, residing at LADERA RANCH, California; and JERN KHANG TAN, a citizen of Malaysia, residing at MUAR, Malaysia, have invented certain new and useful improvements in ELECTRONIC SYSTEM WITH A METHOD OF MOTOR SPINDLE BANDWIDTH ESTIMATION AND CALIBRATION THEREOF (hereafter "Improvements") for which we have executed an application for a United States Patent filed December 23, 2014, Application No. 14/582,123 (hereafter "Application"); and

Whereas, Western Digital Technologies, Inc. (hereafter "Assignee"), a Delaware Corporation, 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 divisions, renewals and continuations 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.

Title of Invention: ELECTRONIC SYSTEM WITH A METHOD OF MOTOR SPINDLE BANDWIDTH ESTIMATION AND CALIBRATION THEREOF		
<u> </u>	2015-11-2	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
ZHOU YONG	Date	
Witnessed by:		
起情 Type/Print I" Witness Name	起発 I" Witness Signature	20/1. 11.2 Date
見 32 32 Type/Print 2 <sup>nd</sup> Witness Name	Z22 2 <sup>nd</sup> Witness Signature	7015./1.2

Atty. Docket No.: T7337

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v.	22/10/2015	
JIE WAN	Date	v
Witnessed by:		
JIN TAO	2	22/10/2015
Type/Print 1st Witness Name	1 <sup>st</sup> Witness Signature	Date
HAN JI WEI	JE44-	22/10/2015
Type/Print 2nd Witness Name	2 <sup>nd</sup> Witness Signature	Date

BANDWIDTH ESTIMATION AND CALI		
Achen shan	22/10/2015	
SHUYU CAO	Date	
Witnessed by:		
JIN 740	4-4	24/10/2015
Type/Print 1st Witness Name	1st Witness Signature	Date
HAN JI WEI	JEM-	22/10/201
Tyne/Print 2nd Witness Name	2nd Witness Signature	Date

ASSIGNMENT

PATENT Atty. Docket No.: T7337

Title of Invention: ELECTRONIC SYSTEM WITH A METHOD OF MOTOR SPINDLE BANDWIDTH ESTIMATION AND CALIBRATION THEREOF		
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.		
State of California ) ss.  County of Orange )  On 10/21/20/5, before me, 1000 Bobble 1, Notary Public, personally appeared JIANGHONG DING who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.		
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.		
WITNESS my hand and official seal.  Signature:  Signature of Notary Public  WENDY BOBELLA Commission # 2050040 Notary Public - California Orange County My Comm. Expires Nov 24, 2017		

PATENT Atty. Docket No.: T7337

Suchinda Paesanthia Type/Print 2 <sup>nd</sup> Witness Name	Ban Whi Mae  2 <sup>nd</sup> Wilness Signature	Nov. 14'2015
Type/Print 1st Witness Name	1 <sup>st</sup> Witness Signature	Date
KARUNA MAHAWAN	Karun	Nov.14'2015
Witnessed by:		
JERN KHANG TAN	Date	
	14 NOV 2015	
Title of Invention: ELECTRONIC SYS BANDWIDTH ESTIMATION AND CALIB		TOR SPINDLE