#### 503696418 02/17/2016

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
HONGXING YUAN	08/10/2015
JINSHAN LI	08/04/2015
ZHONG SHI	09/21/2015

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## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14886870

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ATTORNEY DOCKET NUMBER:	F4458.D1	
NAME OF SUBMITTER:	PAULETTE HALILI	
SIGNATURE:	/Paulette Halili/	
DATE SIGNED:	02/17/2016	

## **Total Attachments: 4**

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> **PATENT REEL: 037755 FRAME: 0670** 503696418

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PATENT REEL: 037755 FRAME: 0671

Atty. Docket No.: F4458

#### ASSIGNMENT

Whereas, we, HONGXING YUAN, a citizen of Singapore, residing at SAN RAMON, California; JINSHAN LI, a citizen of the United States of America, residing at SAN JOSE, California; and ZHONG SHI, a citizen of China, residing at DUBLIN, California, have invented certain new and useful improvements in WAVEGUIDE WITH REFLECTIVE GRATING FOR LOCALIZED ENERGY INTENSITY (hereafter "Improvements") for which we have executed an application for a United States Patent filed July 1, 2014, Application No. 14/321,786 and a provisional application for a United States Patent filed March 12, 2014, Application No. 61/951,618 (hereafter "Applications"); 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 Applications.

Now, therefore, that for good and valuable consideration, the receipt of which is hereby acknowledged, I, the inventor, do hereby acknowledge that I 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 Applications and all divisions, renewals and continuations thereof, and all applications claiming priority to the Applications, 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 I 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.

Atty. Docket No.: F4458

Title of Inve ENERGY INI		WAVEGUIDE	WITH	REFLECTIV	Æ GRAT	ING	FOR	LOCAL	IZED
51 HONGXING	YUAN			08/16 Date	······································	 !}	· · · · · · · · · · · · · · · · · · ·		********
A notary public	or other o which this	fficer completing t	his certifi hed, and n	cate verifies on the truthfulne	y the identit	y of th	e indivi	dual who that docum	signed nent.
appeared RON whose name(s) executed the sa instrument the p	GXING Y GXING Y is/are su ame in his person(s),	where the control of	d to me o within it zed capa behalf o	on the basts of instrument and icity(ies), and of which the pe	satisfactory acknowled that by his/ rson(s) acte	evide ged to her/th d, exe	nce to once to once to one the content of the content of the content on the conte	be the per hat he/sh nature(s) o he instrun	son(s) e/they on the nent.
I certify under paragraph is tru WITNESS my ! Signature:	e and com		under (	the laws of the	State of C	Co No	MARIO MARIO Immissio Iary Pub Santa Ci	RIBEIRO RIBEIRO RIBE COUNTY RIBEIRO RI	34 11a 25

Title of Invention: WAVEGUIDE WITH REFLECTIVE GRATING FOR LOCALIZED ENERGY INTENSITY
JINSHAN LI S/4/2015  Date
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 Cara )
On August 4. 2016, before me, Marchaella Marchaella Molary Public, personally appeared JINSHAN LI 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



PATENT

Atty. Docket No.: F4458

Title of Invention: WAVEGUID	E WITH REFLECTIVE GRATING FOR LOCALIZED
Zh3 63.3	9/21/2015
ZHONG SHI	Date
	g this certificate verifies only the identity of the individual who signed ached, and not the truthfulness, accuracy, or validity of that document.
State of California ) ss.	
County of )	
personally appeared ZHONG SHI who person(s) whose name(s) is/are subscr he/she/they executed the same in his	e me,
I certify under PENALTY OF PERJUR paragraph is true and correct.	RY under the laws of the State of California that the foregoing
WITNESS my hand and official seal.	
Signature: Signature of Notary Public	
Signature of Notary Public	