PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
STEVEN C. RUDY	09/24/2012
MAHENDRA PAKALA	09/27/2012
PRAKASH MANI	09/21/2012
ERIC R. MCKIE	09/28/2012

RECEIVING PARTY DATA

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13631802

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: F5973

NAME OF SUBMITTER: Joshua M. Nelson

Total Attachments: 5

PATENT REEL: 029116 FRAME: 0177 \$40.00 1363180

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> PATENT REEL: 029116 FRAME: 0178

ASSIGNMENT

Whereas, we, STEVEN C. RUDY, a citizen of the United States of America, residing at San Jose, California; MAHENDRA PAKALA, a citizen of the United States of America, residing at Fremont, California; PRAKASH MANI, a citizen of India, residing at Fremont, California; and ERIC R. MCKIE, a citizen of the United Kingdom, residing at Pleasanton, California, have invented certain new and useful improvements in SYSTEMS AND METHODS FOR SHAPING LEADS OF ELECTRONIC LAPPING GUIDES TO REDUCE CALIBRATION ERROR (hereafter "Improvements") for which we have executed an application for a United States Patent filed September 28, 2012, Application No. 13/631,802 (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 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 me 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: SYSTEMS AND METHODS FOR SHAPING LEADS OF ELECTRONIC LAPPING GUIDES TO REDUCE CALIBRATION ERROR
STEVEN C. RUDY Date
State of California) ss. County of ALAMODA)
On
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: MARIO RIBERO Commission # 1856365 Notary Public - California Santa Clara County My Comm. Expires Jul 28, 2013

Title of Invention: SYSTEMS AND METHODS FOR SHAPING LEADS OF ELECTRONIC LAPPING GUIDES TO REDUCE CALIBRATION ERROR
MAHENDRA PAKALA 9-27-12 Date
State of California)) ss. County of)
On, before me,, Notary Public, personally appeared MAHENDRA PAKALA 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

Title of Invention: SYSTEMS AND METHODS FOR SHAPING LEADS OF ELECTRONIC LAPPING GUIDES TO REDUCE CALIBRATION ERROR
M Rakasii Mani Daie
State of California County of Santo Uara) ss. County of Santo Uara) ss. On
appeared PRAKASH MANI 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 National Pupie
HAZEL PILIPINA CERVANTES ESCOLANO Commission & 1907473 Notary Public - California Santa Clara County My Comm Express Oct 3, 2014

ASSIGNMENT PATENT
Atty. Docket No.: F5973

Title of Invention: SYSTEMS AND METHODS FOR SHAPING LEADS OF ELECTRONIC LAPPING GUIDES TO REDUCE CALIBRATION ERROR State of California County of On ______, before me, _______, Notary Public, personally appeared ERIC R. MCKIE 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

RECORDED: 10/11/2012