PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHAEL S. ALLISON	07/17/2014
STEPHEN J. SILVA	06/23/2014
JOHNNY A. LAM	07/17/2014
MATTHEW CALL	06/24/2014

RECEIVING PARTY DATA

Name:	WESTERN DIGITAL TECHNOLOGIES, INC.
Street Address:	3355 MICHELSON DRIVE, SUITE 100
City:	IRVINE
State/Country:	CALIFORNIA
Postal Code:	92612

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	14020686
Application Number:	61857503

CORRESPONDENCE DATA

Fax Number: (949)672-6604

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.

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Correspondent Name: WESTERN DIGITAL

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Address Line 2: 3355 MICHELSON DRIVE, SUITE 100

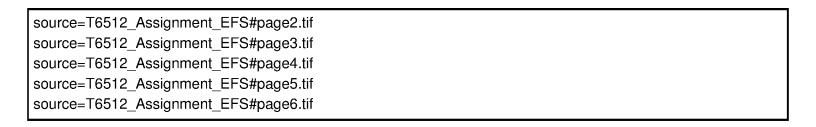
Address Line 4: IRVINE, CALIFORNIA 92612

ATTORNEY DOCKET NUMBER:	T6512
NAME OF SUBMITTER:	TIFFANY CHANG
SIGNATURE:	/Tiffany Chang/
DATE SIGNED:	07/18/2014

Total Attachments: 6

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502899044 PATENT REEL: 033346 FRAME: 0944



PATENT REEL: 033346 FRAME: 0945

ASSIGNMENT

Whereas, we, MICHAEL S. ALLISON, a citizen of the United States of America, residing at Fort Collins, Colorado; STEPHEN J. SILVA, a citizen of the United States of America, residing at Fort Collins, Colorado; JOHNNY A. LAM, a citizen of the United States of America, residing at Firestone, Colorado; and MATTHEW CALL, a citizen of the United States of America, residing at Longmont, Colorado, have invented certain new and useful improvements in POWER FAIL PROTECTION AND RECOVERY USING LOW POWER STATES IN A DATA STORAGE DEVICE/SYSTEM (hereafter "Improvements") for which we have executed an application for a United States Patent filed September 6, 2013, Application No. 14/020,686 and a provisional application for a United States Patent filed July 23, 2013, Application No. 61/857,503 (hereafter "Applications"); 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 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.

ASSIGNMENT

PATENT

Atty. Docket No.: T6512

Title of Invention: POWER FAIL PROTECTION AND RECOVERY USING LOW POWER STATES IN A DATA STORAGE DEVICE/SYSTEM State of Colorado County of Boulder , before me, appeared MICHAEL S. ALLISON 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 Colorado that the foregoing paragraph is true and correct. WITNESS my hand and official seal.

JALEEN HOOPER

NOTARY PUBLIC

STATE OF COLORADO

NOTARY ID 20104026637

MY COMMISSION EXPIRES JULY 29, 2018

Title of Invention: POWER FAIL PROTECTION AND RECOVERY USING LOW POWER STATES IN A DATA STORAGE DEVICE/SYSTEM State of Colorado County of Boulder) ss. On 541e23, 2014, before me, appeared STEPHEN J. SILVA 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 Colorado that the foregoing paragraph is true and correct. WITNESS my hand and official seal. Signature:

State of Colorado

My Commision Expires 07/29/2014

Jaleen Hooper Notary Public

STATES IN A DATA STORAGE DEVICE/SYSTEM
John My A. LAM 7/17/14 Date
State of Colorado) County of Soulder) ss.)
County of Source)
on July 17, 2014, before me, Jalen Hooper, Notary Public, personally appeared JOHNNY A. LAM 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 Colorado that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.
Signature: Signature of Notary Public
IM EEN HOODED
JALEEN HOOPER

STATE OF COLORADO NOTARY ID 20104026637 MY COMMISSION EXPIRES JULY 29, 2018

NOTARY PUBLIC

Title of Invention: POWER FAIL PROTECTION AND RECOVERY USING LOW POWER STATES IN A DATA STORAGE DEVICE/SYSTEM State of Colorado Jaleen __, before me, <u>_</u> personally appeared MATTHEW CALL 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 Colorado that the foregoing paragraph is true and correct. WITNESS my hand and official seal. Signatures Jaleen Hooper **Notary Public** State of Colorado My Commision Expires 07/29/2014

U.S. Serial No. 14/020,686 (Attorney Docket No. T6512) U.S. Serial No. 61/857,503 (Attorney Docket No. T6512.P)

ACCEPTANCE OF ASSIGNMENT

(Patent Application)

Assignee Western Digital Technologies, Inc. ("Assignee") hereby acknowledges that MICHAEL S. ALLISON, STEPHEN J. SILVA, JOHNNY A. LAM, and MATTHEW CALL have executed the above assignment concerning a utility (provisional or non-provisional) or design patent application entitled

"POWER FAIL PROTECTION AND RECOVERY USING LOW POWER STATES IN A DATA STORAGE DEVICE/SYSTEM"

filed with the U.S. Patent & Trademark Office on September 6, 2013 and assigned serial no. 14/020,686; and

"SSD POWER FAIL PROTECTION AND RECOVERY USING LOW POWER STATES"

filed with the U.S. Patent & Trademark Office on July 23, 2013 and assigned serial no. 61/857,503.

Assignee further acknowledges receipt of the entire right, title and interest in and to the patents and/or patent application(s) listed herein ("Application(s)"), 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 listed Application(s) in any country or countries foreign to the United States and all extensions, renewals and reissues thereof.

Signature:

RECORDED: 07/18/2014

David H. Chan, Patent Counsel

Assignee Western Digital Technologies, Inc.

PATENT REEL: 033346 FRAME: 0951

Date: <u>July 18 20</u>14