502613623 12/24/2013

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2660173

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZHENGANG CHEN	12/09/2013
YUNXIANG WU	12/09/2013
ERICH HARATSCH	12/20/2013

RECEIVING PARTY DATA

Name:	LSI CORPORATION
Street Address:	1320 RIDDER PARK DRIVE
City:	SAN JOSE
State/Country:	CALIFORNIA
Postal Code:	95131

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14108226

CORRESPONDENCE DATA

Fax Number:

Phone: 720-266-4728

Email: dhamilton@hdciplaw.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: DOUGLAS M. HAMILTON Address Line 1: 8601 W. CROSS DRIVE

Address Line 2: F5-301

Address Line 4: LITTLETON, COLORADO 80123

Signature:	/Douglas M. Hamilton/	
NAME OF SUBMITTER:	DOUGLAS M. HAMILTON	
ATTORNEY DOCKET NUMBER:	AGERE-050600	

PATENT 502613623 REEL: 031846 FRAME: 0541

OP \$40.00 14108226

Date:	12/24/2013
Total Attachments: 3 source=ExecutedAssignmentAGERE-05060 source=ExecutedAssignmentAGERE-05060 source=ExecutedAssignmentAGERE-05060	00#page2.tif

PATENT REEL: 031846 FRAME: 0542

ASSIGNMENT AGREEMENT

WHEREAS, Zhengang Chen of San Jose, CA, USA, Yunxiang Wu of Cupertino, CA, and Erich F. Haratsch of San Jose, CA, USA (the "INVENTOR") conceived of one or more inventions and improvements related to Systems and Methods for Soft Decision Generation in a Solid State Memory System (the "INVENTIONS");

WHEREAS, a patent application (the "APPLI	iCATION") for the	INVENTIONS:	
will be filed with the United Sta	ites Patent and Tr	rademark Office (the "U	SPTO"); or
$\underline{\underline{}}$ was filed with the USPTO on $\underline{\underline{}}$	12/16/2013	as Application No	14/108,226

WHEREAS, LSI Corporation, a Delaware corporation having an office at 1320 Ridder Park Drive, San Jose, CA 95131, United States of America (the "ASSIGNEE") desires to acquire the entire right, title and interest in and to the INVENTIONS, and all patent applications and all patents granted, or that may be granted hereafter for the INVENTIONS.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, INVENTOR does hereby sell, assign and transfer to ASSIGNEE, and its successors, assigns and legal representatives, the entire right, title and interest, for the United States and all foreign countries, in and to the INVENTIONS, and in and to the APPLICATION and all provisional, divisional, continuing, substitute, renewal, reissue, reexamination and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries for the INVENTIONS, and all the rights and privileges under any and all Letters Patent that may be granted therefore including any reissues, reexaminations and extensions thereof, together with all claims for damages by reason of past infringement of said patent with the right to sue for and collect the same.

INVENTOR agrees to sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable or convenient for/securing and maintaining patents or other forms of protection for the INVENTIONS in any and all countries and for vesting title thereto in ASSIGNEE.

INVENTOR authorizes and empowers ASSIGNEE to make applications for patent or other form of protection for the INVENTIONS in ASSIGNEE's own name in any and all countries, and to invoke and claim for any application for patent or other form of protection for the INVENTIONS filed by ASSIGNEE, the benefit of all rights of priority provided by any and all treaties, conventions or agreements without further written or oral authorization.

INVENTOR does hereby consent that a copy of this Assignment Agreement shall be deemed a full legal and formal equivalent of any assignment, consent to file or similar document which may be required in any country for any purpose, including proof of the right of ASSIGNEE to apply for patent or other form of protection for the INVENTIONS and to claim the aforesaid benefit of the right of priority.

INVENTOR hereby grants to the firm of Hamilton, DeSanctis & Cha, or its agents, the power to insert on this Assignment Agreement any further identification, including, but not limited to, application numbers and filing daye, which may be necessary or desirable to comply with any request of the USPTO for purpose of recording this Assignment Agreement

IN WITNESS WHEREOF, INVENTOR signed on the date set forth below.

INVENTOR	INVENTOR	INVENTOR
Zhengang Chen	Yunxiang Wu	Erich F. Haratsch
2/9/2013 Date	Date	Date

PATENT REEL: 031846 FRAME: 0543 From: 408 433 7236 12/09/2013 14:15 #177 P.001/002

ASSIGNMENT AGREEMENT

WHEREAS, Zhengang Chen of San Jose, CA, USA, Yunxiang Wu of Cupertino, CA, and Erich F. Haratsch of San Jose, CA, USA (the "INVENTOR") conceived of one or more inventions and improvements related to Systems and Methods for Soft Decision Generation in a Solid State Memory System (the "INVENTIONS");

WHEREAS, a patent application (the "APPL	.ICATION") for the	INVENTIONS:	
will be filed with the United Sta	ates Patent and Tr	rademark Office (the "USPTO"); or	
$\underline{\underline{}}$ was filed with the USPTO on	12/16/2013	as Application No	, _1

WHEREAS, LSI Corporation, a Delaware corporation having an office at 1320 Ridder Park Drive, San Jose, CA 95131, United States of America (the "ASSIGNEE") desires to acquire the entire right, title and interest in and to the INVENTIONS, and all patent applications and all patents granted, or that may be granted hereafter for the INVENTIONS.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, INVENTOR does hereby sell, assign and transfer to ASSIGNEE, and its successors, assigns and legal representatives, the entire right, title and interest, for the United States and all foreign countries, in and to the INVENTIONS, and in and to the APPLICATION and all provisional, divisional, continuing, substitute, renewal, reissue, reexamination and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries for the INVENTIONS, and all the rights and privileges under any and all Letters Patent that may be granted therefore including any reissues, reexaminations and extensions thereof, together with all claims for damages by reason of past infringement of said patent with the right to sue for and collect the same.

INVENTOR agrees to sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable or convenient for securing and maintaining patents or other forms of protection for the INVENTIONS in any and all countries and for vesting title thereto in ASSIGNEE.

INVENTOR authorizes and empowers ASSIGNEE to make applications for patent or other form of protection for the INVENTIONS in ASSIGNEE's own name in any and all countries, and to invoke and claim for any application for patent or other form of protection for the INVENTIONS filed by ASSIGNEE, the benefit of all rights of priority provided by any and all treaties, conventions or agreements without further written or oral authorization.

INVENTOR does hereby consent that a copy of this Assignment Agreement shall be deemed a full legal and formal equivalent of any assignment, consent to file or similar document which may be required in any country for any purpose, including proof of the right of ASSIGNEE to apply for patent or other form of protection for the INVENTIONS and to claim the aforesaid benefit of the right of priority.

INVENTOR hereby grants to the firm of Hamilton, DeSanctis & Cha, or its agents, the power to insert on this Assignment Agreement any further identification, including, but not limited to, application numbers and filing daye, which may be necessary or desirable to comply with any request of the USPTO for purpose of recording this Assignment Agreement

IN WITNESS WHEREOF, INVENTOR signed on the date set forth below.

INVENTOR	INVENTOR LATURE	INVENTOR
Zhengang Chen	Yunxiang Wu	Erich F. Haratsch
	12/09/2013	
Date	Date	Date

ASSIGNMENT AGREEMENT

WHEREAS, Zhengang Chen of San Jose, CA, USA, Yunxiang Wu of Cupertino, CA, and Erich F. Haratsch of San Jose, CA, USA (the "INVENTOR") conceived of one or more inventions and improvements related to Systems and Methods for Soft Decision Generation in a Solid State Memory System (the "INVENTIONS");

WHEREAS, a patent application (the "APPLICATION") for the INVENTIONS:	
will be filed with the United States Patent and Trademark Office (the "U	ISPTO"); or
was filed with the USPTO onas Application No	14/108,226 ;

WHEREAS, LSi Corporation, a Delaware corporation having an office at 1320 Ridder Park Drive, San Jose, CA 95131, United States of America (the "ASSIGNEE") desires to acquire the entire right, title and interest in and to the INVENTIONS, and all patent applications and all patents granted, or that may be granted hereafter for the INVENTIONS.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, INVENTOR does hereby sell, assign and transfer to ASSIGNEE, and its successors, assigns and legal representatives, the entire right, title and interest, for the United States and all foreign countries, in and to the INVENTIONS, and in and to the APPLICATION and all provisional, divisional, continuing, substitute, renewal, reissue, reexamination and all other applications for Letters Patent which have been or shall be filled in the United States and all foreign countries for the INVENTIONS, and all the rights and privileges under any and all Letters Patent that may be granted therefore including any reissues, reexaminations and extensions thereof, together with all claims for damages by reason of past infringement of said patent with the right to sue for and collect the same.

INVENTOR agrees to sign all papers, take all rightful oaths, make all rightful declarations and do all acts which may be necessary, desirable or convenient for securing and maintaining patents or other forms of protection for the INVENTIONS in any and all countries and for vesting title thereto in ASSIGNEE.

INVENTOR authorizes and empowers ASSIGNEE to make applications for patent or other form of protection for the INVENTIONS in ASSIGNEE's own name in any and all countries, and to invoke and claim for any application for patent or other form of protection for the INVENTIONS filed by ASSIGNEE, the benefit of all rights of priority provided by any and all treaties, conventions or agreements without further written or oral authorization.

INVENTOR does hereby consent that a copy of this Assignment Agreement shall be deemed a full legal and formal equivalent of any assignment, consent to file or similar document which may be required in any country for any purpose, including proof of the right of ASSIGNEE to apply for patent or other form of protection for the INVENTIONS and to claim the aforesaid benefit of the right of priority.

INVENTOR hereby grants to the firm of Hamilton, DeSanctis & Cha, or its agents, the power to insert on this Assignment Agreement any further identification, including, but not limited to, application numbers and filing daye, which may be necessary or desirable to comply with any request of the USPTO for purpose of recording this Assignment Agreement

IN WITNESS WHEREOF, INVENTOR signed on the date set forth below.

INVENTOR	INVENTOR	NYENTOR / // /
		- Mula Mustell
Zhengang Chen	Yunxiang Wu	Erich F. Haratsch
		12/2/2013
Date	Date	Date

PATENT REEL: 031846 FRAME: 0545

RECORDED: 12/24/2013