

## PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>James A. Rizzo</td> <td>03/16/2012</td> </tr> <tr> <td>: Basavaraj G. Hallyal</td> <td>03/09/2012</td> </tr> <tr> <td>Gerald E. Smith</td> <td>03/15/2012</td> </tr> <tr> <td>Adam Weiner</td> <td>05/01/2012</td> </tr> <tr> <td>Vinu Velayudhan</td> <td>03/09/2012</td> </tr> </tbody> </table>		Name	Execution Date	James A. Rizzo	03/16/2012	: Basavaraj G. Hallyal	03/09/2012	Gerald E. Smith	03/15/2012	Adam Weiner	05/01/2012	Vinu Velayudhan	03/09/2012
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James A. Rizzo	03/16/2012												
: Basavaraj G. Hallyal	03/09/2012												
Gerald E. Smith	03/15/2012												
Adam Weiner	05/01/2012												
Vinu Velayudhan	03/09/2012												
RECEIVING PARTY DATA													
Name:	LSI CORPORATION												
Street Address:	1621 Barber Lane												
Internal Address:	IP Legal Dept. MS D-106												
City:	Milpitas												
State/Country:	CALIFORNIA												
Postal Code:	95035												
PROPERTY NUMBERS Total: 1													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13432220</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13432220								
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Application Number:	13432220												
CORRESPONDENCE DATA													
Fax Number:	(303)786-7691												
Phone:	303-786-7687												
Email:	mnguyen@dbflaw.com												
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>													
Correspondent Name:	Daniel N. Fishman												
Address Line 1:	Duff Bornsen & Fishman, LLP												
Address Line 2:	1526 Spruce Street, Suite 302												
Address Line 4:	Boulder, COLORADO 80302												
ATTORNEY DOCKET NUMBER:	11-1504												

OP \$40.00 13432220

NAME OF SUBMITTER:

Daniel Fishman

**Total Attachments: 8**

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ASSIGNMENT AGREEMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, **James A. Rizzo; Gerald E. Smith; Adam Weiner**, hereby sell, assign and transfer to LSI Corporation, a corporation of the State of Delaware, having an office at 1621 Barber Lane, Milpitas, CA 95035, United States of America, and its successors, assigns and legal representatives (collectively "Assignee"), the entire right, title and interest, for the United States and all foreign countries, in and to any and all inventions and improvements ("Inventions") as described and/or claimed in an application for Letters Patent of the United States of America entitled **METHODS AND STRUCTURE FOR MANAGING VISIBILITY OF DEVICES IN A CLUSTERED STORAGE SYSTEM** and assigned attorney docket number **11-1504**, and in and to the application and all 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.

I/We agree that when requested will, without charge to Assignee but at its expense, 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.

I/We authorize and empower 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.

I/We 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.

IN WITNESS WHEREOF, I/we have hereunto signed my/our name(s) on the day and year set forth below.

James A Rizzo  
Inventor's Signature

3/16/2012  
DATE

James A. Rizzo  
Inventor's Printed Name

STATE OF Texas )  
COUNTY OF Travis ) ss.  
)

Before me, a Notary Public in and for said County and State, personally appeared James A. Rizzo, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this 16 day of March, 2012.

Katherine C Smith  
Notary Public  
My Commission Expires:





**ASSIGNMENT AGREEMENT**

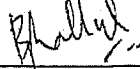
For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, Basavaraj G. Halliyal, hereby sell, assign and transfer to LSI Corporation, a corporation of the State of Delaware, having an office at 1621 Barber Lane, Milpitas, CA 95035, United States of America, and its successors, assigns and legal representatives (collectively "Assignee"), the entire right, title and interest, for the United States and all foreign countries, in and to any and all inventions and improvements ("Inventions") as described and/or claimed in an application for Letters Patent of the United States of America entitled **METHODS AND STRUCTURE FOR MANAGING VISIBILITY OF DEVICES IN A CLUSTERED STORAGE SYSTEM** and assigned attorney docket number 11-1504, and in and to the application and all 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.

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IN WITNESS WHEREOF, I have hereunto signed my/our name(s) on the day and year set forth below.

  
\_\_\_\_\_  
Inventor's Signature

03/09/12  
\_\_\_\_\_  
DATE

Basavaraj G. Halliyal  
\_\_\_\_\_  
Inventor's Printed Name

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California  
County of Santa Clara

On March 9, 2012 before me, Connie C. del Castillo, Notary Public.  
Date Here Insert Name and Title of the Officer

personally appeared Basavaraj G. Hallyal,  
Name of Signer

who proved to me on the basis of satisfactory evidence to be the person whose name is/are subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person 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 Connie C. del Castillo  
Signature of Notary Public

Place Notary Seal Above

**OPTIONAL**

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

**Description of Attached Document**

Title or Type of Document: Assignment Agreement (Docket No. 11-1504)

Document Date: \_\_\_\_\_ Number of Pages: 1

Signer Other Than Named Above: N/A

**Capacity Claimed by Signer**

Signer's Name: Basavaraj G. Hallyal

- Individual
- Corporate Officer - Title: \_\_\_\_\_
- Partner -  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

Signer is Representing: Self

**ASSIGNMENT AGREEMENT**

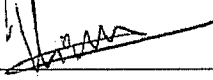
For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, Vinu Velayudhan, hereby sell, assign and transfer to LSI Corporation, a corporation of the State of Delaware, having an office at 1621 Barber Lane, Milpitas, CA 95035, United States of America, and its successors, assigns and legal representatives (collectively "Assignee"), the entire right, title and interest, for the United States and all foreign countries, in and to any and all inventions and improvements ("Inventions") as described and/or claimed in an application for Letters Patent of the United States of America entitled **METHODS AND STRUCTURE FOR MANAGING VISIBILITY OF DEVICES IN A CLUSTERED STORAGE SYSTEM** and assigned attorney docket number 11-1504, and in and to the application and all 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.

I agree that when requested will, without charge to Assignee but at its expense, 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,

I authorize and empower 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.

I 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.

IN WITNESS WHEREOF, I have hereunto signed my/our name(s) on the day and year set forth below.

  
\_\_\_\_\_  
Inventor's Signature

03-09-2012.  
\_\_\_\_\_  
DATE

Vinu Velayudhan  
\_\_\_\_\_  
Inventor's Printed Name

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California  
County of Santa Clara

On March 9, 2012 before me, Connie C. del Castillo, Notary Public,  
Date Here Insert Name and Title of the Officer

personally appeared Vinu Velayudhan,  
Name of Signer

who proved to me on the basis of satisfactory evidence to be the person whose name is/are subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person 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 Connie C. del Castillo  
Signature of Notary Public



Place Notary Seal Above

**OPTIONAL**

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

**Description of Attached Document**

Title or Type of Document: Assignment Agreement (Docket No. 11-1504)

Document Date: \_\_\_\_\_ Number of Pages: 1

Signer Other Than Named Above: N/A

**Capacity Claimed by Signer**

Signer's Name: Vinu Velayudhan

- Individual
- Corporate Officer - Title: \_\_\_\_\_
- Partner -  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_

Signer is Representing: Self





\_\_\_\_\_  
Inventor's Signature

\_\_\_\_\_  
DATE

Gerald E. Smith  
Inventor's Printed Name

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss.  
\_\_\_\_\_ )

Before me, a Notary Public in and for said County and State, personally appeared Gerald E. Smith, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_, 2012.

\_\_\_\_\_  
Notary Public  
My Commission Expires:

[Signature]  
Inventor's Signature

5/11/2012  
DATE

Adam Weiner  
Inventor's Printed Name

STATE OF Nevada )  
COUNTY OF Washoe ) ss.  
\_\_\_\_\_ )



Before me, a Notary Public in and for said County and State, personally appeared Adam Weiner, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_, 2012.

[Signature]  
Notary Public  
My Commission Expires: