

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>David J. Lilja</td> <td>06/27/2012</td> </tr> <tr> <td>Jian-Ping Wang</td> <td>12/10/2012</td> </tr> <tr> <td>Andrew P. Lyle</td> <td>06/28/2012</td> </tr> <tr> <td>Shruti R. Patil</td> <td>06/18/2012</td> </tr> <tr> <td>Jonathan D. Harms</td> <td>07/31/2012</td> </tr> <tr> <td>Xiaofeng Yao</td> <td>08/20/2012</td> </tr> </tbody> </table> | | Name | Execution Date | David J. Lilja | 06/27/2012 | Jian-Ping Wang | 12/10/2012 | Andrew P. Lyle | 06/28/2012 | Shruti R. Patil | 06/18/2012 | Jonathan D. Harms | 07/31/2012 | Xiaofeng Yao | 08/20/2012 |
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| Xiaofeng Yao | 08/20/2012 | | | | | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td>Name:</td> <td>Regents of the University of Minnesota</td> </tr> <tr> <td>Street Address:</td> <td>450 McNamara Alumni Center, 200 Oak Street SE</td> </tr> <tr> <td>City:</td> <td>Minneapolis</td> </tr> <tr> <td>State/Country:</td> <td>MINNESOTA</td> </tr> <tr> <td>Postal Code:</td> <td>55455</td> </tr> </table> | | Name: | Regents of the University of Minnesota | Street Address: | 450 McNamara Alumni Center, 200 Oak Street SE | City: | Minneapolis | State/Country: | MINNESOTA | Postal Code: | 55455 | | | | |
| Name: | Regents of the University of Minnesota | | | | | | | | | | | | | | |
| Street Address: | 450 McNamara Alumni Center, 200 Oak Street SE | | | | | | | | | | | | | | |
| City: | Minneapolis | | | | | | | | | | | | | | |
| State/Country: | MINNESOTA | | | | | | | | | | | | | | |
| Postal Code: | 55455 | | | | | | | | | | | | | | |
| 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>13475544</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13475544 | | | | | | | | | | |
| Property Type | Number | | | | | | | | | | | | | | |
| Application Number: | 13475544 | | | | | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | | | | | |
| Fax Number: 6123343312 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 6123343222 Email: cnelson@wck.com Correspondent Name: Theodore M. Magee Address Line 1: 900 Second Avenue South, Suite 1400 Address Line 4: Minneapolis, MINNESOTA 55402 | | | | | | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | U11.12-0207 | | | | | | | | | | | | | | |
| NAME OF SUBMITTER: | Theodore M. Magee | | | | | | | | | | | | | | |

OP \$40.00 13475544

| | |
|--|---------------------|
| Signature: | /Theodore M. Magee/ |
| Date: | 06/12/2013 |
| <p>Total Attachments: 15</p> <p>source=Signed Assignment#page1.tif</p> <p>source=Signed Assignment#page2.tif</p> <p>source=Signed Assignment#page3.tif</p> <p>source=Signed Assignment#page4.tif</p> <p>source=Signed Assignment#page5.tif</p> <p>source=Signed Assignment#page6.tif</p> <p>source=Signed Assignment#page7.tif</p> <p>source=Signed Assignment#page8.tif</p> <p>source=Signed Assignment#page9.tif</p> <p>source=Signed Assignment#page10.tif</p> <p>source=Signed Assignment#page11.tif</p> <p>source=Signed Assignment#page12.tif</p> <p>source=Signed Assignment#page13.tif</p> <p>source=Signed Assignment#page14.tif</p> <p>source=Signed Assignment#page15.tif</p> | |

ASSIGNMENT

Attorney Docket No.

U11.12-0207

WHEREAS, we, David J. Lilja of Maplewood, Minnesota, USA; Jian-Ping Wang of Shoreview, Minnesota, USA; Andrew P. Lyle of Boise, Idaho, USA; Shruti R. Patil of Santa Clara, California, USA; Jonathan D. Harms of Hopkins, Minnesota, USA; and Xiaofeng Yao of San Jose, California, USA (hereinafter referred to as ASSIGNORS), are the inventors of an invention described in an application for Letters Patent of the United States entitled SYSTEMS AND METHOD FOR DIRECT COMMUNICATION BETWEEN MAGNETIC TUNNEL JUNCTIONS, the application having been executed on even date herewith, and/or being identifiable in the United States Patent and Trademark Office by Application No. 13/475,544, filed May 18, 2012; and

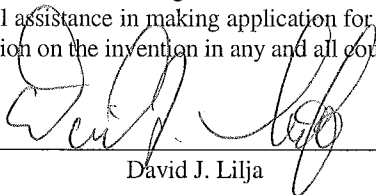
WHEREAS, Regents of the University of Minnesota, a corporation, organized and existing under the laws of the State of Minnesota, and having offices at 450 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, MN 55455, ("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the application, and any and all Letters Patent or similar legal protection, foreign or domestic, to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, we transfer to Assignee, its successors and assigns, our entire right, title and interest in and to the invention, the above-identified application, Provisional Application No. 61/487,761, filed May 19, 2011, corresponding domestic and foreign applications including continuation applications, continuing applications, divisional applications and continuation-in-part applications, all Letters Patent(s) or similar legal protection issuing thereon, and all rights and benefits under any applicable treaty or convention; and we authorize the Director of the United States Patent and Trademark Office or foreign equivalent thereof to issue the Letters Patent or similar legal protection to the Assignee.

We authorize the Assignee, its successors and assigns, to insert in this instrument the filing date and serial number of the application when ascertained.

We authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries.

We represent to the Assignee, its successors and assigns, that we have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. We, our executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries.

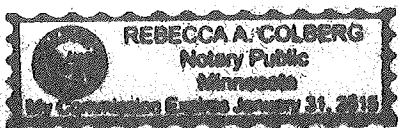

David J. Lilja

STATE OF MINNESOTA)
) ss.
COUNTY OF Ramsey)

Subscribed and sworn to before me, a Notary Public, this 27th day of June, 2012


Notary Public

(SEAL)



ASSIGNMENT

Attorney Docket No.

U11.12-0207



Jian-Ping Wang

STATE OF MINNESOTA)

) ss.

COUNTY OF Hennepin)

Subscribed and sworn to before me, a Notary Public, this tenth day of December, 2012.

Marlene L. Woo for Jianping Wang only
Notary Public



Andrew P. Lyle

Witnessed by: _____

Date: _____

Signature

Printed Name

Address

ASSIGNMENT

Attorney Docket No.

U11.12-0207

Shruti R. Patil

Witnessed by: _____

Date: _____

Signature

Printed Name

Address

Jonathan D. Harms

STATE OF MINNESOTA _____)

) ss.

COUNTY OF _____)

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)

Xiaofeng Yao

Witnessed by: _____

Date: _____

Signature

Printed Name

Address

ASSIGNMENT

Attorney Docket No.

U11.12-0207

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David J. Lilja

STATE OF MINNESOTA)
) ss.
COUNTY OF _____)

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)

ASSIGNMENT

Attorney Docket No.

U11.12-0207

Jian-Ping Wang

STATE OF MINNESOTA)

) ss.

COUNTY OF)

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)

Andrew P. Lyle

Witnessed by:

Signature

Date:

Printed Name

Address

JOH LAW CORPORATION
ADVOCATES & SOLICITORS
BLK 712A ANG MO KIO AVE 6
#03-4058
SINGAPORE 561712
TEL 6553 4800 FAX: 6553 4811



ASSIGNMENT

Attorney Docket No.

U11.12-0207

Shruti R. Patil

Witnessed by: _____

Date: _____

Signature

Printed Name

Address

Jonathan D. Harms

STATE OF MINNESOTA _____)

COUNTY OF _____)

ss.

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)

Xiaofeng Yao

Witnessed by: _____

Date: _____

Signature

Printed Name

Address

ASSIGNMENT

Attorney Docket No.

U11.12-0207

WHEREAS, we, David J. Lilja of Maplewood, Minnesota, USA; Jian-Ping Wang of Shoreview, Minnesota, USA; Andrew P. Lyle of Boise, Idaho, USA; Shruti R. Patil of Santa Clara, California, USA; Jonathan D. Harms of Hopkins, Minnesota, USA; and Xiaofeng Yao of San Jose, California, USA (hereinafter referred to as ASSIGNORS), are the inventors of an invention described in an application for Letters Patent of the United States entitled SYSTEMS AND METHOD FOR DIRECT COMMUNICATION BETWEEN MAGNETIC TUNNEL JUNCTIONS, the application having been executed on even date herewith, and/or being identifiable in the United States Patent and Trademark Office by Application No. 13/475,544, filed May 18, 2012; and

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David J. Lilja

STATE OF MINNESOTA)

) ss.

COUNTY OF _____)

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)

ASSIGNMENT

Attorney Docket No.

U11.12-0207

Jian-Ping Wang

STATE OF MINNESOTA)
) ss.
COUNTY OF _____)

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)

Andrew P. Lyle

Witnessed by: _____

Date: _____

Signature

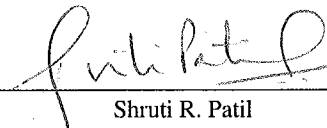
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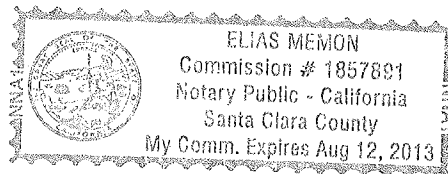
Address

ASSIGNMENT

Attorney Docket No.

U11.12-0207


Shruti R. Patil



Witnessed by: _____

Date: 06-18-2012

Signature

Printed Name

Address

State of California
County of Santa Clara

Subscribed and sworn to (or affirmed) before me on
this 18 day of JUNE, 2012,
by SHRUTI R. PATIL
proved to me on the basis of satisfactory evidence to
be the person(s) who appeared before me.
Elias Memon

Jonathan D. Harms

STATE OF MINNESOTA _____)
_____) ss.
COUNTY OF _____)

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)

Xiaofeng Yao

Witnessed by: _____

Date: _____

Signature

Printed Name

Address

ASSIGNMENT

Attorney Docket No.

U11.12-0207

WHEREAS, we, David J. Lilja of Maplewood, Minnesota, USA; Jian-Ping Wang of Shoreview, Minnesota, USA; Andrew P. Lyle of Boise, Idaho, USA; Shruti R. Patil of Santa Clara, California, USA; Jonathan D. Harms of Hopkins, Minnesota, USA; and Xiaofeng Yao of San Jose, California, USA (hereinafter referred to as ASSIGNORS), are the inventors of an invention described in an application for Letters Patent of the United States entitled SYSTEMS AND METHOD FOR DIRECT COMMUNICATION BETWEEN MAGNETIC TUNNEL JUNCTIONS, the application having been executed on even date herewith, and/or being identifiable in the United States Patent and Trademark Office by Application No. 13/475,544, filed May 18, 2012; and

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David J. Lilja

STATE OF MINNESOTA)
) ss.
COUNTY OF _____)

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)

ASSIGNMENT

Attorney Docket No.

U11.12-0207

Jian-Ping Wang

STATE OF MINNESOTA)
) ss.
COUNTY OF _____)

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)

Andrew P. Lyle

Witnessed by: _____

Date: _____

Signature

Printed Name

Address

ASSIGNMENT

Attorney Docket No.

U11.12-0207

Shruti R. Patil

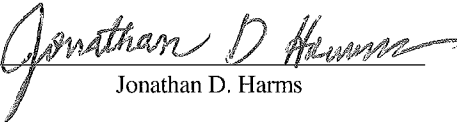
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Signature


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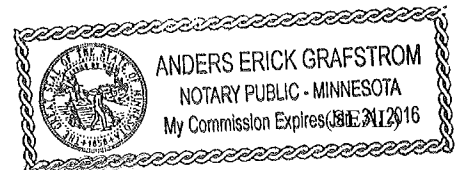
Address


Jonathan D. Harms

STATE OF MINNESOTA)
COUNTY OF HENNEPIN) ss.

Subscribed and sworn to before me, a Notary Public, this 31 day of JULY, 2012.


Notary Public



Xiaofeng Yao

Witnessed by: _____

Date: _____

Signature

Printed Name

Address

ASSIGNMENT

Attorney Docket No.

U11.12-0207

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David J. Lilja

STATE OF MINNESOTA _____)
) ss.
COUNTY OF _____)

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)

ASSIGNMENT

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Jian-Ping Wang

STATE OF MINNESOTA)
) ss.
COUNTY OF _____)

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)

Andrew P. Lyle

Witnessed by: _____

Date: _____

Signature

Printed Name

Address

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Attorney Docket No.

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Shruti R. Patil

Date: _____

Witnessed by: _____

Signature

Printed Name

Address


Jonathan D. Harms

STATE OF MINNESOTA)
) ss.
COUNTY OF _____)

Subscribed and sworn to before me, a Notary Public, this _____ day of _____, _____.

Notary Public

(SEAL)



Xiaofeng Yao

Witnessed by: _____

Signature

Printed Name

HAZEL C. NICOLANDS

Address

1710 AUTOMATION PKWY
SAN JOSE, CA 95131

Date: 08/20/12