

Form PTO-1595 (Rev. 03-09)  
OMB No. 0651-0027 (exp. 03/31/2009)

U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

## RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

### 1. Name of conveying party(ies):

Yifei Yuan (01/13/2011), Shupeng Li (01/10/2011),  
and David Huo (01/11/2011)

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

### 3. Nature of conveyance/Execution Date(s):

Execution Date(s): in parentheses after inventor name

- ☐ Assignment ☐ Merger ☐ Change of Name  
☐ Security Agreement ☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☒ Other filling date of application should be 1/5/11,  
not 01/01/0001

### 2. Name and address of receiving party(ies)

Name: ZTE USA INC.

Internal Address: \_\_\_\_\_

Street Address: \_\_\_\_\_

2425 N. Central Expressway, Suite 323

City: Richardson

State: Texas

Country: United States of America Zip: 75080

Additional name(s) & address(es) attached? ☒ Yes ☐ No

### 4. Application or patent number(s):

A. Patent Application No.(s)

12/984,969

☐ This document is being filed together with a new application.

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

### 5. Name and address to whom correspondence concerning document should be mailed:

Name: Zhun Lu  
CONNOLLY BOVE LODGE & HUTZ LLP

Internal Address: Atty. Dkt.: 15747-00073-US

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Phone Number: (302) 658-9141

Fax Number: (302) 658-5614

Email Address: zlu@cblh.com

### 6. Total number of applications and patents involved:

1

### 7. Total fee (37 CFR 1.21(h) & 3.41) \$ N/A

- ☐ Authorized to be charged to deposit account  
☐ Enclosed  
☐ None required (government interest not affecting title)

### 8. Payment Information

Deposit Account Number \_\_\_\_\_  
Authorized User Name \_\_\_\_\_

### 9. Signature:

[Signature]  
Signature

Zhun Lu - 53,242

Name of Person Signing

February 8, 2011

Date

Total number of pages including cover sheet, attachments, and documents: 14

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted by facsimile to the Patent and Trademark Office, facsimile no. (571) 273-0140, on the date shown below.

Dated: 2/8/11

Signature: [Signature]

(Linda Curtin)



<b>RECORDATION FORM COVER SHEET (PTO-1595)</b> (supplemental sheet)	
<b>Additional Conveying Party(ies)/Execution Date(s) (1. Continued):</b>  	
<b>Additional Assignees (2. Continued):</b>	
Assignee Name: <u>ZTE Corporation</u>	
Internal Address:	
Street Address: <u>ZTE Plaza</u> <u>Keji Road South</u> <u>Hj-Tech Industrial Park</u> <u>Nanshan District, Guangdong; Shenzhen 518057; PEOPLE'S REPUBLIC OF CHINA</u>	
City: _____ State: _____ Country: _____ Zip: _____	
Assignee Name: _____	
Internal Address:	
Street Address:	
City: _____ State: _____ Country: _____ Zip: _____	
Assignee Name: _____	
Internal Address:	
Street Address:	
City: _____ State: _____ Country: _____ Zip: _____	
<b>Additional Applications and/or Patents (4. Continued):</b>	
Additional Patent Application Numbers 4A. Continued:	Additional Patent Numbers 4B. Continued:
Additional numbers attached? <input type="checkbox"/> Yes <input type="checkbox"/> No	



<b>RECORDATION FORM COVER SHEET (PTO-1595)</b> (supplemental sheet)					
<b>Additional Conveying Party(ies)/Execution Date(s) (1. Continued):</b>   					
<b>Additional Assignees (2. Continued):</b>  Assignee Name: <u>ZTE Corporation</u> Internal Address: Street Address: <u>ZTE Plaza</u> <u>Keji Road South</u> <u>Hi-Tech Industrial Park</u> <u>Nanshan District, Guangdong, Shenzhen 518057, PEOPLE'S REPUBLIC OF CHINA</u> City: _____ State: _____ Country: _____ Zip: _____					
 Assignee Name: _____ Internal Address: Street Address:  City: _____ State: _____ Country: _____ Zip: _____					
 Assignee Name: _____ Internal Address: Street Address:  City: _____ State: _____ Country: _____ Zip: _____					
<b>Additional Applications and/or Patents (4. Continued):</b> <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 50%; padding: 5px; vertical-align: top;">Additional Patent Application Numbers 4A. Continued:</th><th style="width: 50%; padding: 5px; vertical-align: top;">Additional Patent Numbers 4B. Continued:</th></tr></thead><tbody><tr><td style="height: 150px;"></td><td style="height: 150px;"></td></tr></tbody></table> <div style="text-align: right; margin-top: 10px;">Additional numbers attached? <input type="checkbox"/> Yes <input type="checkbox"/> No</div>		Additional Patent Application Numbers 4A. Continued:	Additional Patent Numbers 4B. Continued:		
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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>Yifei Yuan</td><td>01/13/2011</td></tr><tr><td>Shupeng Li</td><td>01/10/2011</td></tr><tr><td>David Huo</td><td>01/11/2011</td></tr></tbody></table>		Name	Execution Date	Yifei Yuan	01/13/2011	Shupeng Li	01/10/2011	David Huo	01/11/2011		
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Yifei Yuan	01/13/2011										
Shupeng Li	01/10/2011										
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RECEIVING PARTY DATA											
<table border="1"><tr><td>Name:</td><td>ZTE Corporation</td></tr><tr><td>Street Address:</td><td>ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Guangdong</td></tr><tr><td>City:</td><td>Shenzhen</td></tr><tr><td>State/Country:</td><td>CHINA</td></tr><tr><td>Postal Code:</td><td>518057</td></tr></table>		Name:	ZTE Corporation	Street Address:	ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Guangdong	City:	Shenzhen	State/Country:	CHINA	Postal Code:	518057
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Postal Code:	518057										
<table border="1"><tr><td>Name:</td><td>ZTE USA Inc.</td></tr><tr><td>Street Address:</td><td>2425 N. Central Expressway, Suite 323</td></tr><tr><td>City:</td><td>Richardson</td></tr><tr><td>State/Country:</td><td>TEXAS</td></tr><tr><td>Postal Code:</td><td>75080</td></tr></table>		Name:	ZTE USA Inc.	Street Address:	2425 N. Central Expressway, Suite 323	City:	Richardson	State/Country:	TEXAS	Postal Code:	75080
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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>12084969</td></tr></tbody></table>		Property Type	Number	Application Number:	12084969						
Property Type	Number										
Application Number:	12084969										
CORRESPONDENCE DATA											
Fax Number: (302)858-5614 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
Phone: 302-858-9141											
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OP \$40.00 12934969



ATTORNEY DOCKET NUMBER:	15747-00073
NAME OF SUBMITTER:	Zhun Lu
Total Attachments: 5 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif	



**ASSIGNMENT BY INVENTORS**

**THIS ASSIGNMENT**, by Yifei Yuan; Shupeng Li; and David Huo (hereinafter referred to as Assignors), the mailing addresses of all being 33 Wood Ave. S., 2nd Floor, Iselin, New Jersey 08830;

**WHEREAS**, Assignors have invented certain new and useful improvements in **METHOD AND SYSTEM FOR SPATIAL CHANNEL STATE INFORMATION FEEDBACK BASED ON A KRONECKER PRODUCT**, set forth in a Patent application for Letters Patent of the United States, already filed on January 5, 2011 as U.S. Application No. 12/984,969; and

**WHEREAS**, ZTE Corporation and ZTE USA INC., both Corporations, organized under and pursuant to the laws of China and United States of America, respectively having their principal places of business at ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Guangdong, Shenzhen 518057, PEOPLE'S REPUBLIC OF CHINA; and 2425 North Central Expressway, Suite 323, Richardson, Texas 75080, respectively (hereinafter referred to as Assignees). are desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

**NOW, THEREFORE**, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the



same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply




with the rules of the United States Patent and Trademark Office for recordation of this document:

CONNOLLY BOVE LODGE & HUTZ LLP

All practitioners at Customer Number 23416

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Date: 1/13/2011 Signature:   
Yifei Yuan

Date: \_\_\_\_\_ Signature: \_\_\_\_\_  
Shupeng Li

Date: \_\_\_\_\_ Signature: \_\_\_\_\_  
David Huo



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Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Yifei Yuan

Date: 01/10/11

Signature:   
Shupeng Li

Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
David Huo



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Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Yifei Yuan

Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Shupeng Li

Date: 4/11/2011

Signature:   
David Huo