

## PATENT ASSIGNMENT

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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>Jingcheng Zhuang</td><td>11/18/2008</td></tr><tr><td>Robert B. Staszewski</td><td>11/18/2008</td></tr><tr><td>Khurram Waheed</td><td>11/18/2008</td></tr></tbody></table>		Name	Execution Date	Jingcheng Zhuang	11/18/2008	Robert B. Staszewski	11/18/2008	Khurram Waheed	11/18/2008
Name	Execution Date								
Jingcheng Zhuang	11/18/2008								
Robert B. Staszewski	11/18/2008								
Khurram Waheed	11/18/2008								
RECEIVING PARTY DATA									
Name:	Texas Instruments Incorporated								
Street Address:	PO Box 655474								
Internal Address:	Mail Station 3999								
City:	Dallas								
State/Country:	TEXAS								
Postal Code:	75265-5474								
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>12324308</td></tr></tbody></table>		Property Type	Number	Application Number:	12324308				
Property Type	Number								
Application Number:	12324308								
CORRESPONDENCE DATA									
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<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
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Correspondent Name:	TEXAS INSTRUMENTS INCORPORATED								
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ATTORNEY DOCKET NUMBER:	12411.0128								
NAME OF SUBMITTER:	Howard Zaretsky								
Total Attachments: 3 source=assignment#page1.tif									

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PATENT  
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**ASSIGNMENT**

WHEREAS, WE,

<u>Inventor Name</u>	<u>Address</u>	<u>Nationality</u>
Jingcheng Zhuang	910 Redbird Ln., Allen TX 75013	Canada
Robert B. Staszewski	413 West Muirfield Rd, Garland TX 75044,	United States
Khurram Waheed	3625 Mistyglen Dr, Plano TX 75025,	Pakistan

hereinafter called 'Assignors', have made certain inventions in

**BANDWIDTH REDUCTION MECHANISM FOR POLAR MODULATION**

described in U.S. Application Serial No. 12/324,308, filed November 26, 2008 by us, hereinafter the 'Patent Application', and

WHEREAS,

Texas Instruments Incorporated  
PO Box 655474  
Mail Station 3999  
Dallas TX 75265-5474

a Delaware corporation, hereinafter called 'Assignee', is desirous of securing an undivided One Hundred Percent (100%) of the entire right, title and interest in and to said Patent Application, said inventions, applications and Letters Patent, when granted, and in and to any divisions, continuations, continuations-in-part, improvements, reissues or extensions that may be granted on any of them;

NOW, THEREFORE, BE IT KNOWN that for and in consideration of the sum of One Dollar (\$1.00) to us in hand paid by the said Assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the Assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over unto the said Assignee, its successors and assigns, an undivided One Hundred Percent (100%) of the entire right, title and interest throughout the world in and to said Patent Application, said inventions, applications, Letters Patent, when granted, and in and to any divisions, continuations, continuations-in-part, improvements, reissues or extensions that may be made or granted on any of them;

TO HAVE AND TO HOLD the same to the full end of the term or terms for which said Letters Patent may be granted, as fully and completely as the same might be held by us had this sale and assignment not been made.

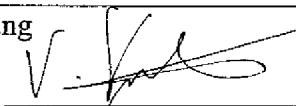
For the consideration aforesaid, we hereby covenant and agree to and with the said Assignee, its successors and assigns what whenever its counsel or representative, or the counsel or representative of its successors or assigns, shall advise of, or any other proceeding or action in connection with said application or inventions, including interference proceedings, is lawful and desirable, or that a reissue or continuation, continuation-in-part or extension of said Patent Application, said Letters Patent is lawful and desirable, we will sign all lawful papers and drawings, execute all divisional, continuation, reissue and substitute applications, take all rightful oaths and affidavits, testify in any legal proceedings, and do all acts necessary or required to be done for the reissue of continuation, continuation-in-part or extension of same, and will do all acts necessary or required to secure to the said Assignee, its successors and assigns, the title to and full benefit of all rights hereby assigned, without charge to said Assignee or its successors or assigns, but at its or their expense.

AND the Commissioner of Patents and Trademarks is requested to issue the said Letters Patent, when granted, in accordance with this sale and assignment.

For the consideration aforesaid, we have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto the said Assignee, its successors and assigns, or the nominees of any of them, an undivided One Hundred Percent (100%) of the entire right, title and interest in and to any and all Letters Patent for said inventions which may be granted in countries foreign to the United States, and in and to any applications for Letters Patent which may be filed for said inventions in countries foreign to the United States, and in and to the inventions described in said applications; and we hereby authorize and empower said Assignee and its successors, assigns or nominees, to apply for Letters Patent or other form of protection on said inventions in its own name or in the name of its successors, assigns or nominees, in any or all countries where it may desire to file such applications, and where said applications may be filed by other than the inventor; and we hereby covenant and agree to sign all papers and drawings, take all rightful oaths, execute all rightful affidavits, and do all acts necessary or required to be done for the procurement and maintenance of Letters Patent or other form of protection for said inventions in countries foreign to the United States, and for further investing or confirming the right and title thereto in the Assignee, its successor, assigns or nominees, but at its or their expense.

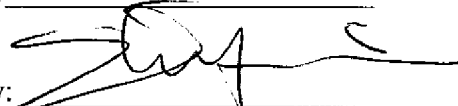
The undersigned hereby grant(s) to the firm of Zaretsky Patent Group PC, 17505 North 79<sup>th</sup> Ave, Glendale AZ 85308-8726, the power to insert on this assignment any further identification of the Patent Application which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office concerning recordation of this document.

  
\_\_\_\_\_  
Jingcheng Zhuang

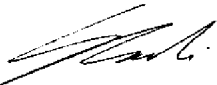
Witnessed By:  \_\_\_\_\_


Name: Vishi Venkataraman

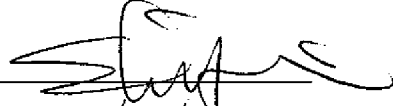
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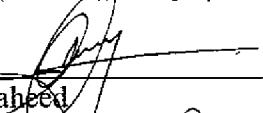
Witnessed By:  \_\_\_\_\_

Name: ~~11/18/2008~~  
Fugiang Shi

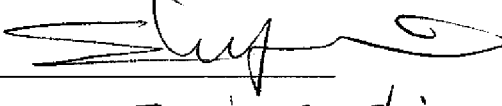
  
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Robert B. Staszewski Date: 11/18/2008

Witnessed By:   
\_\_\_\_\_  
Name: Vishi Venkataraman

Witnessed By:   
\_\_\_\_\_  
Name: 11/18/2008 Fuqiang Shi

  
\_\_\_\_\_  
Khurram Waheed Date: 11/18/2008

Witnessed By:   
\_\_\_\_\_  
Name: Vishi Venkataraman

Witnessed By:   
\_\_\_\_\_  
Name: Fuqiang Shi