

**PATENT ASSIGNMENT**

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Jun Zheng	12/31/2009
Mark Kent	01/04/2010
Vinko Erceg	12/31/2009
<b>RECEIVING PARTY DATA</b>	
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<b>City:</b>	Irvine
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	92617
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	12652150
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<b>NAME OF SUBMITTER:</b>	Hopeton S. Walker

CH \$40.00 12652150

Total Attachments: 5  
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**PATENT**  
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**ASSIGNMENT**

Case No.: 20850US01

Serial No.:

Inventors: Jun Zheng  
Mark Kent  
Vinko Erceg

Filing Date:

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assigns to Broadcom Corporation, a California corporation, its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled: "A METHOD AND SYSTEM FOR USING NON-UNIFORM CHANNEL QUANTIZATION FOR A FEEDBACK-BASED COMMUNICATION SYSTEM", and identified as File No. 20850US01, in the offices of McANDREWS, HELD & MALLOY, LTD., and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any continuation, continuation-in-part, divisional, re-examination, reissue or extension of such applications or patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.


The undersigned hereby authorizes and requests the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known, if applicable.

The undersigned warrants himself to be the owner of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrants that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agrees, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all continuation, continuation-in-part, divisional, re-examination, extension and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue, re-examination or extension of any Letters Patent that may be granted upon said application, and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorizes said assignee to apply for patents for said invention or improvements in its own name in such

countries where such procedure is proper and further agrees, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain said Letters Patent, both United States and foreign, and to vest all rights hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

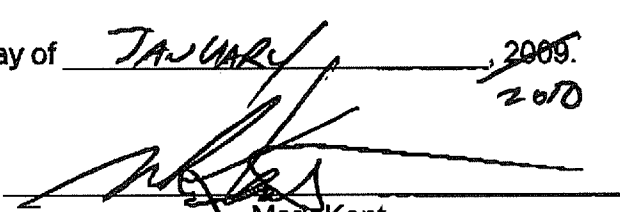
WITNESS my hand this 31 day of December, 2009.



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Jun Zheng

WITNESS my hand this 4<sup>th</sup> day of JANUARY, 2009.  
2010

  
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Mark Kent

WITNESS my hand this 31 day of December, 2009.

Vinko Erceg  
Vinko Erceg