

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>Wael William Diab</td> <td>07/03/2008</td> </tr> <tr> <td>Kevin Clyde Brown</td> <td>08/24/2008</td> </tr> </tbody> </table>		Name	Execution Date	Wael William Diab	07/03/2008	Kevin Clyde Brown	08/24/2008				
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Broadcom Corporation</td> </tr> <tr> <td>Street Address:</td> <td>5300 California Avenue</td> </tr> <tr> <td>City:</td> <td>Irvine</td> </tr> <tr> <td>State/Country:</td> <td>CALIFORNIA</td> </tr> <tr> <td>Postal Code:</td> <td>92617</td> </tr> </table>		Name:	Broadcom Corporation	Street Address:	5300 California Avenue	City:	Irvine	State/Country:	CALIFORNIA	Postal Code:	92617
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Application Number:	13471763										
CORRESPONDENCE DATA											
<p>Fax Number: (703)935-0276 Phone: 703-437-8000 Email: dskoba@mac.com <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: LAW OFFICE OF DUANE S. KOBAYASHI Address Line 1: P.O. Box 4160 Address Line 4: Leesburg, VIRGINIA 20177</p>											
ATTORNEY DOCKET NUMBER:	BU7013C1/BCOM.5160001										
NAME OF SUBMITTER:	Duane S. Kobayashi										
<p>Total Attachments: 3 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif</p>											

OP \$40.00 13471763

PATENT

ASSIGNMENT

File No.: 19264US03

Serial No.: 12/235,368

Inventors: Wael William Diab
Kevin Brown

Filing Date: September 22, 2008

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, each of the undersigned hereby assigns to Broadcom Corporation, incorporated under the laws of the state of California, 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: "METHOD AND SYSTEM FOR ASYMMETRIC OPERATION IN A NETWORK NODE IN AN ENERGY EFFICIENT NETWORK" and identified as File No. 19264US03 in the offices of McANDREWS, HELD & MALLOY, LTD., and in provisional applications filed in the United States Patent and Trademark Office as Serial No. 61/014,195 on December 17, 2007, and Serial No. 61/094,626 on September 5, 2008, and in said applications 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 patents, and further assigns to said assignee the priority right provided by the International Convention.

Each of the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee. Each of 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. Each of the undersigned warrants himself/herself 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, each of 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 document 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 each of 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

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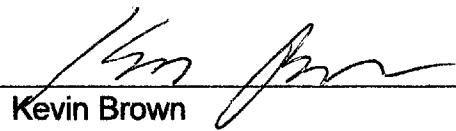
successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence and performing any and all other acts necessary to obtain said Letters Patent, both United States and foreign, and vest all rights therein 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 3rd day of July, 2008.



Wael William Diab

WITNESS my hand this 24 day of August, 2008.


Kevin Brown