RECORDATION FORM COVER SHEET 16203US02  PATENTS ONLY	
To the Director of the U.S. Patents and Trademark Office: Please record the attached documents or the new address(es) below.	
1. Name of conveying party(ies):  Mark Kent  Vinko Erceg  Uri M. Landau  Pieter G.W. van Rooyen	Name and address of receiving party(ies)  Name: Broadcom Corporation  Internal Address:
Execution Date(s) June 22, 2005 Additional name of conveying party(ies) attached?   No 3. Nature of conveyance/Execution Date(s):  Execution Date(s)	Street Address: 16215 Alton Parkway P.O. Box 57013 City: Irvine
⊠ Assignment ☐ Merger	State: California
<ul> <li>☐ Security Agreement</li> <li>☐ Government Interest Assignment</li> <li>☐ Executive Order 9424, Confirmatory License</li> <li>☐ Other</li> </ul>	Country: USA Zip: 92619-7013  Additional Name(s) & address(es) attached? ☐ Yes ☒ No
4. Application number(s) or patent number(s):	This document is being filed together with a new application.
A. Patent Application No.(s) 11/173,964	B. Patent No.(s)
Additional numbers attached? ☐ Yes ☑ No	
5. Name and address of party to whom correspondence concerning this document should be mailed:	6. Total number of applications and patents involved: 1
Name: McAndrews, Heid & Malloy	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Internal Address:	□ Authorized to be charged by credit card     □ Authorized to be charged to deposit account     □ Enclosed
Street Address: 500 West Madison Street	
34 <sup>th</sup> Floor City: Chicago	None required (government interest not affecting title)
State: IL Zip: 60661	Payment Information     a. Credit Card
Phone Number : (312) 775-8000	Expiration Date
Fax Number: (312) 775-8100	b. Deposit Account Number 13-0017
Email Address:	Authorized User Name McAndrews Held & Malloy, Ltd.
9. Signature : Signature	Z
Ognyan I. Beremski Reg. No. 51,458	Total number of pages sheet, attachments, and documents 6

## ASSIGNMENT

File No.:

16203US02

Serial No.: 11/173,964

Inventor:

Mark Kent

Filing Date: June 30, 2005

Vinko Erceg

Uri M. Landau

Pieter G. W. van Rooyen

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 CHANNEL ESTIMATION IN A SINGLE CHANNEL (SC) SINGLE-INPUT MULTIPLE-OUTPUT (SIMO) SYSTEM" and identified as File No. 16203US02, in the offices of McANDREWS, HELD & MALLOY, LTD., and in a provisional application filed in the United States Patent and Trademark Office as Serial No. 60/616,309 on October 6, 2004, 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 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 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 assignce, 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

PATENT REEL: 016603 FRAME: 0472 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,

day of

2005

Mark Kent

16203US02

WITNESS my hand this 22 day of Julie , 2005.

Vinko Erceg

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WTNESS my hand this 22 day of 5000, 2005.

Uri M. Landau

16203US02

WITNESS my hand this  $\geq \geq$  day of  $\int C |D| \mathcal{E}$  , 2005.

Pieter G. W. van Rooyen

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PATENT REEL: 016603 FRAME: 0476