

FORM PTO-1595

1/31/92

04-11-2002

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

F



102052156

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copies thereof.

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

Alexander G. MacInnis, Vivian Hsiun, Sheng  
Zhong, Xiaodong Xie, Kimming So, Jose R. AlvarezAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other: \_\_\_\_\_Execution Date: 03.29.02, 03.29.02, 03.29.02,  
03.30.02, 03.29.02, 03.29.02

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

Broadcom Corporation  
16215 Alton Parkway  
Irvine, CA 92618Additional name(s) & address(es) attached? ☐ Yes ☒ Nojc971 U.S. PTO  
10/114797  
04/01/02

4-1-02

10/114797

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

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

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

John A. Wiberg  
McAndrews, Held & Malloy, Ltd.  
500 W. Madison, 34<sup>th</sup> Floor  
Chicago, IL 60661

## 6. Total number of applications and patents involved: 1

## 7. Total fee (37 CFR 3.41): \$40.00

☒ Enclosed.☐ Authorized to be charged to deposit account.

## 8. Deposit account number: 13-0017.

(Attach duplicate copy of this page if paying by deposit account).

## 9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Signature and Registration Number:

Date: April 1, 2002

Registration No. 44,401

Name of Person Signing: John A. Wiberg

Total number of pages including cover sheet, attachments and document: 10

PATENT TRADEMARK OFFICE

PATENT  
REEL: 012764 FRAME: 0453

**ASSIGNMENT  
(JOINT INVENTORSHIP)**

Case No.: 13304US01

Serial No.:

Inventors: Alexander G. MacInnis  
Vivian Hsiun  
Sheng Zhong

Don Xie  
Kimming So  
Jose' R. Alvarez

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: **METHOD OF COMMUNICATING BETWEEN MODULES IN A DECODING SYSTEM**, and identified as **Case No. 13304US01**, 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, reexamination, reissue or extension of such applications or patents, and further assign 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.

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, 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 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 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 has not been made.

WITNESS my hand and seal this 29 day of MARCH 2002.

  
Alexander G. MacInnis

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_ 2002.

\_\_\_\_\_  
Vivian Hsiun

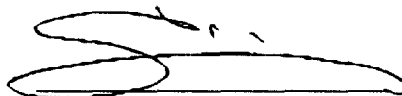
WITNESS my hand and seal this 29 day of March 2002.

  
Sheng Zhong

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_ 2002.


\_\_\_\_\_  
Don Xie

WITNESS my hand and seal this 29<sup>th</sup> day of March 2002.



Kimming So

WITNESS my hand and seal this 29 day of March 2002.



Jose R. Alvarez

**ASSIGNMENT  
(JOINT INVENTORSHIP)**

Case No.: 13304US01

Serial No.:

Inventors: Alexander G. MacInnis  
Vivian Hsiun  
Sheng Zhong

Don Xie  
Kimming So  
Jose' R. Alvarez

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: **METHOD OF COMMUNICATING BETWEEN MODULES IN A DECODING SYSTEM**, and identified as **Case No. 13304US01**, 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, reexamination, reissue or extension of such applications or patents, and further assign 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.

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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, 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 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 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 has not been made.

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_ 2002.

\_\_\_\_\_  
Alexander G. MacInnis

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_ 2002.

\_\_\_\_\_  
Vivian Hsiun

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_ 2002.

\_\_\_\_\_  
Sheng Zhong

WITNESS my hand and seal this 30th day of March 2002.

Xiaodong Xie  
Xiaodong Xie

**WITNESS** my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_ 2002.

\_\_\_\_\_  
Kimming So

**WITNESS** my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_ 2002.

\_\_\_\_\_  
Jose' R. Alvarez

**ASSIGNMENT  
(JOINT INVENTORSHIP)**

Case No.: 13304US01

Serial No.:

Inventors: Alexander G. MacInnis  
Vivian Hsiun  
Sheng Zhong

Don Xie  
Kimming So  
Jose' R. Alvarez

Filing Date:

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