

BP 2097

12/12/02



PATENT AND TRADEMARK OFFICE

To the Honorable Commissioner of Patents and

102318347

J original documents or copy thereof

Name of conveying party(ies):

Mark Dale, Anders Hebsgaard, David Hartman, Alan Kwentus, Steven Jaffe, Kelly Cameron, Stephen Krafft, Alan Gin, Jen-chieh (Jack) Chien, Dorothy Lin, Rocco Brescia, and Joyce Wang

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

Name: Broadcom Corporation

Internal Address:

Jc945 U.S. PTO
10/319929
12/13/02

Additional name(s) of conveying party(ies) attached? yes no

3. Nature of conveyance:

- Assignment Merger
- Security Agreement Change of Name

Execution Dates: Nov. 19, 2002, Nov. 18, 2002, Nov. 15, 2002, Dec. 2, 2002, Nov. 27, 2002, Dec. 3, 2002, Dec. 5, 2002, Nov. 15, 2002, Nov. 15, 2002, Nov. 15, 2002, Nov. 27, 2002, and Nov. 15, 2002

Street Address: 16215 Alton Parkway
City: Irvine State: California Zip: 92618-7013
Country: United States

Additional name(s) & address(es) attached? Yes No

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: **December 5, 2002**

A. Patent Application No.(s)

B. Patent No.(s)

10/319929

Additional numbers attached? Yes No

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

Name: Bruce E. Garlick

Internal Address: Garlick, Harrison & Markison, LLP

Street Address: P.O. Box 160727

City: Austin

State: TX Zip: 78716-0727

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

1

7. Total fee (37 C.F.R. 3.41) \$ 40.00

- Enclosed
- Authorized to be charged to deposit account

8. Deposit account number:

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

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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.

Bruce E. Garlick

Name of Person Signing

Signature

Dec. 13, 2002

Date

Total number of pages comprising cover sheet:

1

ASSIGNMENT FOR PATENT APPLICATION

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventor(s) Mark Dale, Anders Hebsgaard, David Hartman, Alan Kwentus, Steven Jaffe, Kelly Cameron, Stephen Krafft, Alan Gin, Jen-chieh (Jack) Chien, Dorothy Lin, Rocco Brescia, and Joyce Wang, the undersigned inventor(s) hereby sell(s) and assign(s) to Broadcom Corporation, a California corporation having a principal place of business at 16215 Alton Parkway, Irvine, California 92618-7013 (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages:

check applicable box (es) for the United States of America (as defined in 35 U.S.C. § 100 et seq.),
 and throughout the world,

(a) in the invention(s) known as **DOWNSTREAM TIME DOMAIN BASED ADAPTIVE MODULATION FOR DOCSIS BASED APPLICATIONS** (BP 2097) for which application(s) for patent in the United States of America has (have) been executed by the undersigned on DECEMBER, NOV, 2002 in any and all applications thereon, in any and all Letters Patent(s) therefor, and

(b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and

(c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

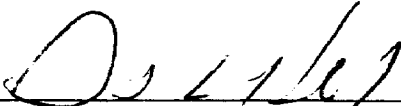
The undersigned inventor(s) hereby represent(s) that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventor(s) hereby grant(s): Bruce E. Garlick, Registration No. 36,520, James A. Harrison, Registration No. 40,401, Timothy W. Markison, Registration No. 33,534, and Shayne X. Short, Registration No. 45,105; all of Garlick, Harrison & Markison, LLP, P.O. Box 160727, Austin, Texas 78716-0727, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.


IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her name.

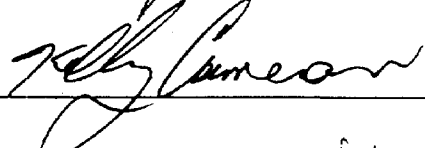
Mark Dale:  Date: 11/19/02

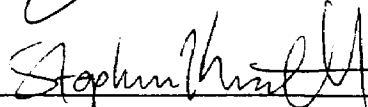
Anders Hebsgaard: _____ Date: _____

David Hartman:  Date: 11/15/02

Alan Kwentus:  Date: 12/2/2002

Steven Jaffe:  Date: 11/27/02

Kelly Cameron:  Date: 12/3/02

Stephen Krafft:  Date: 12/5/02

Alan Gin: Alan Gin Date: 11/15/2002

Jen-chieh (Jack) Chien: Jen-chieh Chien Date: 11/15/2002

Dorothy Lin: Dorothy Lin Date: 11/15/2002

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Joyce Wang: Joyce Wang Date: 11/15/2002

Attorney Docket No.: BP 2097

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IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her name.

Mark Dale: _____ Date: _____

Anders Hebsgaard: *Anders Hebsgaard* Date: *11-18-02*

David Hartman: _____ Date: _____

Alan Kwentus: _____ Date: _____

Steven Jaffe: _____ Date: _____

Kelly Cameron: _____ Date: _____

Stephen Krafft: _____ Date: _____

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(c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

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