

3/31/5

04-12-2005

Form PTO-1595 (Rev. 06/04)
OMB No. 0651-0027 (exp. 6/30/2005)

U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office



REC

102978505
PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)/Execution Date(s):

- 1. Pieqing Wang; and
- 2. Scott R. Powell

Execution Date(s) 1. 03/28/2005; and 2. 03/28/2005

Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)

Name: Broadcom Corporation

Internal Address: _____

Street Address: 16215 Alton Parkway

City: Irvine

State: California

Country: _____ Zip: 92618-3616

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

3. Nature of conveyance:

- Assignment Merger
- Security Agreement Change of Name
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other _____

4. Application or patent number(s):

This document is being filed together with a new application.

A. Patent Application No.(s)

B. Patent No.(s)

To Be Assigned

Additional numbers attached? Yes No

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

Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.

Internal Address: c/o Edward J. Kessler

Street Address: 1100 New York Avenue, N.W.

City: Washington

State: D.C. Zip: 20005-3934

Phone Number: (202) 371-2600

Fax Number: (202) 371-2540

Email Address: _____

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- Authorized to be charged by credit card
- Authorized to be charged to deposit account
- Enclosed
- None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers 1005
Expiration Date 08/2005

b. Deposit Account Number 19-0036

Authorized User Name SKGF PLLC

9. Signature:

Virgil L. Beaston
Signature

3/31/05
Date

Virgil L. Beaston
Name of Person Signing

Reg. No. 47,415

Total number of pages including cover sheet, attachments, and documents:

3

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450 381498

04/01/2005 SMINASS1 00000090 11094314

04 FD:8021

(40.00 OP)

PATENT
REEL: 016439 FRAME: 0067

112978 U.S. PTO
11/094314



033105

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventors: (1) Pieqing Wang and (2) Scott R. Powell, the undersigned inventors hereby sell and assign to **Broadcom Corporation** (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),
 and throughout the world,

(a) in the invention(s) known as **Echo Canceller Gain Control for Channel Diagnostic Systems** for which application(s) for patent in the United States of America has (have) been executed by the undersigned on (1) 3/28/2005 and (2) 3/28/2005 (also known as United States Application No. **(To Be Assigned)**, filed **(Herewith)**), (Attorney Docket No. 1875.6570000), 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 inventors hereby represent 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 hereby grant(s) Jeffrey DeRoy Wheeler, Registration No. 39,066; Noel Benjamin Whitley, Registration No. 42,225; and Harry Shannon Tyson, Jr., Registration No. 42,193, of **BROADCOM CORPORATION**, 16215 Alton Parkway, Irvine, CA 92618-3616, and Robert Greene Sterne, Esquire, Registration No. 28,912; Edward J. Kessler, Esquire, Registration No. 25,688; Jorge A. Goldstein, Esquire, Registration No. 29,021; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert W. Esmond, Esquire, Registration No. 32,893; Tracy-Gene G. Durkin, Esquire, Registration No. 32,831; Michele A. Cimbala, Esquire, Registration No. 33,851; Michael B. Ray, Esquire, Registration No. 33,997; Robert E. Sokohl, Esquire, Registration No. 36,013; Eric K. Steffe, Esquire, Registration No. 36,688; Michael Q. Lee, Esquire, Registration No. 35,239; Steven R. Ludwig, Esquire, Registration No. 36,203; John M. Covert, Esquire, Registration No. 38,759; Linda E. Alcorn, Esquire, Registration No. 39,588; Lawrence B. Bugaisky, Esquire, Registration No. 35,086; Donald J. Featherstone, Esquire, Registration No. 33,876; Robert C. Millonig, Esquire, Registration No. 34,395; Michael V. Messinger, Esq., Registration No. 37,575; Judith U. Kim, Esq., Registration No. 40,679; Timothy J. Shea, Jr., Esq., Registration No. 41,306; Patrick E. Garrett, Esq., Registration No. 39,987; Jeffrey Helvey, Registration No. 44,757; Heidi L. Kraus, Registration No. 43,730; Eldora Ellison, Registration No. 39,967; and Thomas C. Fiala, Registration No. 43,610, all of **STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.**, 1100 New York Avenue, N.W., Washington, D.C. 20005-3934, 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.

Date: 3/28/2005 Signature of Inventor: 
Pieqing Wang

Date: 3/28/2005 Signature of Inventor: 
Scott R. Powell

377483