

09-06-2002



Form PTO-1595  
(Rev. 03/01)  
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PATENTS ONLY

U.S. Department of Commerce  
Patent and Trademark Office

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

1. Name of conveying party(ies):  
(1) Keshab K. Parhi; (2) Jin-Gyun Chung;  
(3) Kwang-Cheol Lee; and (4) Kyung-Ju Cho  
*08/30/02*  
Additional name(s) of conveying party(ies) attached?  yes  no

2. Name and address of receiving party(ies):  
Name: Broadcom Corporation  
Street Address: 16215 Alton Parkway  
City: Irvine State: CA Zip Code: 92618-3616  
Country: USA  
Additional name(s) & address(es) attached?  yes  no

3. Nature of Conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_  
Execution Dates: August 30, 2002; August 29, 2002;  
August 29, 2002; and August 29, 2002

4. Application number(s) or patent number(s): *10/231179*  
If this document is being filed together with a new application, the execution dates of the application are August 30, 2002; August 29, 2002; August 29, 2002; and August 29, 2002

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:  
Name: **Sterne, Kessler, Goldstein & Fox P.L.L.C.**  
Internal Address: c/o Virgil L. Beaston  
Street Address: 1100 New York Ave., N.W.  
Suite 600  
City: Washington State: D.C. Zip Code: 20005-3934

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:  
19-0036  
(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.*

Virgil L. Beaston  
Name of Person Signing  
Registration No. 47,415

*Virgil L. Beaston*  
Signature

8/30/02  
Date

Total number of pages including cover sheet, attachments and document 5

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents and Trademarks, Box Assignments  
Washington, D.C. 20231

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PATENT  
REEL: 013250 FRAME: 0368

10/231179  
08/30/02

09/04/2002 DEMMANU1 00000072 10231179  
40.00 OP  
04 FC:581

## 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) Keshab K. Parhi; (2) Jin-Gyun Chung; (3) Kwang-Cheol Lee; and (4) Kyung-Ju Cho, the undersigned inventor(s) hereby sell(s) and assign(s) 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 **Low Error Fixed-Width Modified Booth Multiplier**, for which a nonprovisional application for patent in the United States of America has been executed by the undersigned on (1) 8/30/02; (2) \_\_\_\_\_; (3) \_\_\_\_\_; and (4) \_\_\_\_\_; (also known as United States Application No. *(to be assigned)*, filed \_\_\_\_\_, and for which a provisional application has been filed in the United States (also known as United States Application No. 60/371,149, filed April 10, 2002)), and in any and all applications thereon, in any and all Letters Patent(s) therefor, and

*RJH*  
*8/30/02*

(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) James D. Bennett, Registration No. 37,550, and David J. Rosmann, Registration No. 43,059, 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; and Robert C. Millonig, Esquire, Registration No. 34,395, all of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Suite 600, 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: 8/30/2002 Signature of Inventor:   
Keshab K. Parhi

Date: \_\_\_\_\_ Signature of Inventor: \_\_\_\_\_  
Jin-Gyun Chung

Date: \_\_\_\_\_ Signature of Inventor: \_\_\_\_\_  
Kwang-Cheol Lee

Date: \_\_\_\_\_ Signature of Inventor: \_\_\_\_\_  
Kyung-Ju Cho

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## 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) Keshab K. Parhi; (2) Jin-Gyun Chung; (3) Kwang-Cheol Lee; and (4) Kyung-Ju Cho, the undersigned inventor(s) hereby sell(s) and assign(s) 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 **Low Error Fixed-Width Modified Booth Multiplier**, for which a nonprovisional application for patent in the United States of America has been executed by the undersigned on (1) \_\_\_\_\_; (2) Aug. 7, 2002; (3) Aug. 29, 2002; and (4) Aug. 29, 2002; (also known as United States Application No. *(to be assigned)*, filed \_\_\_\_\_, and for which a provisional application has been filed in the United States (also known as United States Application No. 60/371,149, filed April 10, 2002)), and 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.

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

Date: \_\_\_\_\_ Signature of Inventor: \_\_\_\_\_  
Keshab K. Parhi

Date: Aug. 29, 2002 Signature of Inventor: \_\_\_\_\_  
Min-Cyuan Chung

Date: Aug. 29, 2002 Signature of Inventor: \_\_\_\_\_  
Kwang-Cheol Lee

Date: Aug. 29, 2002 Signature of Inventor: \_\_\_\_\_  
Kyung-Ju Cho

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