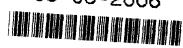
05-05-2006



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

Form **PTO-1595** (Rev. 08/05) OMB No. 0651-0027 (exp. 6/30/2008) Rf

To the Director of the U.S. Patent and Trademark Office. Pleas	e record the attached documents of the new address(es) below.
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
	Name: Broadcom Corporation
Pieter VORENKAMP	Internal Address: ⊃▼
	12959
Additional name(s) of conveying party(ies) attached? Yes X No	16215 Altan Parlament
3. Nature of conveyance/Execution Date(s):	Street Address: 16215 Alton Parkway
Execution Date(s) January 16, 2003	
X Assignment Merger	City: Irvine
Security Agreement Change of Name	Oity. Hvale
Joint Research Agreement	State: California
Government Interest Assignment	Country: United States Zip: 92618-3616
Executive Order 9424, Confirmatory License	Dountry States States 21p. 2010 3010
Other	Additional name(s) & address(es) attached? \square Yes $\stackrel{\textstyle igwedge}{X}$ No
4. Application or patent number(s): X This A. Patent Application No.(s) To Be Assigned	document is being filed together with a new application. B. Patent No.(s)
10 10 1 1000 1000	
Additional numbers att	ached? Yes X No
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: $\frac{1}{}$
Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.	7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00
Internal Address: c/o Theodore A. Wood	X Authorized to be charged by credit card
	Authorized to be charged to deposit account
Street Address: 1100 New York Avenue, N.W.	Enclosed
	None required (government interest not affecting title)
	8. Payment Information
City: Washington	a. Credit Card Last 4 Numbers 1005
State: D.C. Zip: 20005-3934	Expiration Date 08/2009
Phone Number: <u>(202)</u> 371-2600	
Fax Number: (202) 371-2540	b. Deposit Account Number 19-0036
Email Address: twood@skgf.com	Authorized User Name SKGF PLLC
9. Signature: Allane	M 1 2006
Signature	May 1, 2006 Date
	Date
Theodore A. Wood, Reg. No. 52,374	

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

05/03/2006 MBELETE1 00000027 11414211 (40.00 OP) 01 FC:8021

525,722

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 inventor(s): Pieter VORENKAMP, 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 Highly Integrated Asymmetric Digital Subscriber Line (ADSL) Circuit for which application(s) for patent in the United States of America has (have) been executed by the undersigned on 01/16/63 (also known as United States Application No. (To Be Assigned), filed (Herewith), 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.

> PATENT REEL: 017827 FRAME: 0031

Appl. No.: (To Be Assigned) Docket No.: 1875.2340001

The undersigned inventor(s) hereby grant(s) 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; and Patrick E. Garrett, Esq., Registration No. 39,987; 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: 16 Jan 2013 Signature of Inventor:

Pieter VORENKAMP

SKGF DC1 89426.DOC

DO NOT FORWARD TO ASSIGNMENT BRANCH NOT FOR RECORDATION

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 inventor(s): <u>Pieter VORENKAMP</u>, the undersigned inventor(s) hereby sell(s) and assign(s) to <u>Broadcom Corporation</u> (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 <u>Highly Integrated Asymmetric Digital Subscriber Line (ADSL) Circuit</u> for which application(s) for patent in the United States of America has (have) been executed by the undersigned on <u>Ollibia</u> (also known as United States Application No. <u>(To Be Assigned)</u>, filed <u>(Herewith)</u>), 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.

DO NOT FORWARD
TO ASSIGNMENT BRANCH
NOT FOR RECORDATION

PATENT REEL: 017827 FRAME: 0033

DO NOT FORWARD TO ASSIGNMENT BRANCH NOT FOR RECORDATION

Appl. No.: (To Be Assigned) Docket No.: 1875.2340001

The undersigned inventor(s) hereby grant(s) 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; and Patrick E. Garrett, Esq., Registration No. 39,987; 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: 16 Jan 2013 Signature of Inventor.

Pieter VORENKAMP

DO NOT FORWARD TO ASSIGNMENT BRANCH NOT FOR RECORDATION

SKGF DC1 89426.DOC

Page 2 of 2

PATENT REEL: 017827 FRAME: 0034