Ì.	t Equivalent to Form PTO-1595	-2003	
	To the Director of the U.S. Patent and Trademark C 10261	8295 py(ies).	
	1. Name of conveying party(ies):	2. Name and address of receiving party(ies):	
	1) Thomas D. KWON	North Decideory Competition	
	2) Jonathan S. MIN	Name: Broadcom Corporation	
	3) Fang LU	Internal Address:	
	4) Thomas J. KOLZE		
	Additional name(s) of conveying party(ies) attached? yes no	Street Address: 16215 Alton Parkway	
	 3. Nature of Conveyance: 	City: Irvine State: CA Zip Code: 92618-3616	
	□ Other	Country: United States	
	Execution Dates: 1) 09/06/2002 2) 09/06/2002 3) 08/12/2002 4) 09/09/2002	Additional name(s) & address(es) attached? □ yes ⊠ no	
	 4. Application number(s) or patent number(s): 10/120036 If this document is being filed together with a new application, the execution dates of the application are: 1) 09/06/2002; 2) 09/06/2002; 3) 08/12/2002; and 4) 09/09/2002. 		
	A. Patent Application No. To Be Assigned (Cont. of U.S. Appl. No. 10/163,871; Filed: June 7, 2002)	B. Patent No.	
	Additional numbers attached? 🗆 yes 🛛 no		
	Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: <u>1</u>	
	Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.	7. Total fee (37 C.F.R. 3.41)\$_40.00_	
	Internal Address: c/o Robert Sokohl	□ Enclosed	
		A Charge: PTO-2038 Credit Card Form Enclosed	
		□ Authorized to be charged to Deposit Account	
	Street Address: 1100 New York Ave., N.W.	8. Deposit Account Number:	
10/02/0002 50	City: Washington State: D.C. Zip Code: 20005-3934 REGAY1 00000059 10724036	19-0036	
03 FC:8021	40.00 DP	(Attach duplicate copy of this page if paying by deposit account)	
	DO NOT USE THIS SPACE		
	9. Statement and signature. To the best of my knowledge and belief the formeroing information is true and correct and any attached copy is a true copy of the original document. <u>Robert Sokohl</u> Name of Person Signing Registration No. 36,013 Signature		
	Total number of pages including cover sheet, attachments and document: 7		
	Mail documents to be recorded with required cover sheet information to: Director of the U.S. Patent and Trademark Office, Mail Stop Assignment Recordation Services PO Box 1450 Alexandria, VA 22313-1450 SKGF DCI:195170.1		

PATENT REEL: 014756 FRAME: 0951

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): (1) Thomas D. KWON, (2) Jonathan S. MIN, (3) Fang LU, (4) Thomas J. KOLZE signed 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 <u>Receiver Having Decisional Feedback Equalizer With</u> <u>Remodulation and Related Methods</u> for which application(s) for patent in the United States of America has (have) been executed by the undersigned on (1) 9 (2) 9 (1) (3) (4) (also known as United States Application No. <u>10/163,871</u>, filed <u>June 7, 2002</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.

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

Page 1 of 2

Appl. No. 10/163,871 Docket No. 1875.1540001

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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; and 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:	9-6-02	Signature of Inventor:	(4) Thomas D. KWON
Date:	9-6-02	Signature of Inventor:	(2) Jonathan S. MIN
Date:		Signature of Inventor:	(3) Fang LU
Date:		Signature of Inventor:	(4) Thomas J. KOLZE

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): (1) Thomas D. KWON. (2) Jonathan S. MIN. (3) Fang LU. (4) Thomas J. KOLZE signed 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:

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(a) in the invention(s) known as <u>Receiver Having Decisional Feedback Equalizer With</u> <u>Remodulation and Related Methods</u> for which application(s) for patent in the United States of America has (have) been executed by the undersigned on (1) (2) (3) $8^{-1}2^{-0}2$ (4) (also known as United States Application No. <u>10/163,871</u>, filed <u>June 7, 2002</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.

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Page 1 of 2

PATENT REEL: 014756 FRAME: 0954

Appl. No. 10/163,871 Docket No. 1875.1540001

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. 35,086; Donald 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:		Signature of Inventor:	(1) Thomas D. KWON
Date:		Signature of Inventor:	(2) Jonathan S. MIN
Date:	8-12-02	Signature of Inventor:	Jang Lu- (3) Fang LU
Date:		Signature of Inventor:	(4) Thomas J. KOLZE

Page 2 of 2

ASSIGNMENT

In consideration of the sum of One Dollar (51.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventor(s): (1) Thomes D. KWON. (2) Jonathan S. MIN. (3) Fame LU. (4) Thomas J. KOLZE signed inventor(s) hereby sell(s) and assign(s) to <u>Broadrom Cornersion</u> (the Assignce) 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:

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(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, extensione, 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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Page 1 of 2

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PATENT REEL: 014756 FRAME: 0956

Appl. No. 10/163.871 Decket No. 1875.1540001

W. Esmond, Esquire, Registration No. 32,893; Tracy-Gene G. Durkin, Esquire, Registration No. 32,831; Michele A. Cimbela, 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. 36,688; Michael Q. Lee, Esquire, Registration No. 35,759; and Linds E. Alcorn, Esquire, Registration No. 39,588; Lawrence B. Bugaleky, Esquire, Registration No. 35,086; Donald J. Featherstone, Esquire, Registration No. 33,876; and Robert C. Millonig, Registration No. 35,086; Donald J. Featherstone, Esquire, Registration No. 33,876; and Robert C. Millonig, Registration No. 35,086; Donald J. Featherstone, Kessler, Goldstain & 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.

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Date:		Signature of Inventor:	(1) Thomas D. KWON
Dam:		Signature of Invehior:	(2) Jonathan S. MIN
Date:		Signmure of Inventor:	(3) Fang LU
Date:	09 500 2002	Signature of inventor:	(4) Thomas J. KOLLE

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Page 2 of 2

RECORDED: 12/01/2003