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Form PTO-1595 9-10-02		.S. Department of Commerce Patent and Trademark Office	
To the Honorable Commissioner of Patents and 102324	2 nts or copy thereof.		
Name of conveying party(ies): OIPE	2. Name and address of receiving pa	ty(ies):	
(1) Thomas D. KWON (2) Jonathan S. MIN (3) Jonathan S. MIN	Name: Broadcom Corporation		
(2) Jonathan S. MIN (3) Fang LU	Street Address: 16215 Alton Parkwa	y	
(4) Thomas J. KOLZE	City: Irvine State: CA Zip Code:)2618-3616	
Additional name(s) of conveying party(ies) attached? yes no	Country: United States		
3. Nature of Conveyance:	Additional name(s) & address(es) att	ched? □ yes 🛭 no	
■ Assignment □ Merger □ Security Agreement □ Change of Name □ Other □			
Execution Dates: (1) September 6, 2002			
(2) September 6, 2002			
(3) August 12, 2002			
(4) September 9, 2002			
4. Application number(s) or patent number(s):	I		
A. Patent Application No(s).	B. Patent No(s).		
10/163,871 (Filed: June 7, 2002)			
Additional numbers attached?	yes ⊠no		
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and	atents involved:1_	
Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.	7. Total fee (37 C.F.R. § 3.41)\$	<u>10.00</u>	
Internal Address: c/o Albert J. Fasulo, II	Enclosed (Check No. 3	i597)	
Attorney Docket No.: 1875.1540001/RES/AJF	☐ Authorized to be charge	l to Deposit Account	
Street Address: 1100 New York Ave., N.W.	8. Deposit Account Number:		
Suite 600	19-0036		
City: Washington State: D.C. Zip Code: 20005-3934	(Attach duplicate copy of this page if pay	ng by deposit account)	
DO NOT USE THIS SPACE			
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. Albert J. Fasulo, II Name of Person Signing Registration No. 43,607 Septem er 10, 2002 Date			
Total number of pages including cover sheet, attachments and document 7			
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: 013326 FRAME: 0136

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 Corpora ion (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) \boxtimes for the United States of America (as defined in 35 U.S \square . § 100), \boxtimes and throughout the world,

(a) in the invention(s) known as Receiver Having Decisional Feedback Equal zer With Remodulation and Related Methods for which application(s) for patent in the Un ted States of America has (have) been executed by the undersigned on (1) 9 (also known as Un ted States Application No. 10/163,871, filed June 7, 2002), in any and all applications thereon, n 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, it 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 at plication(s) as the Assignee may deem necessary or expedient.

The undersigned inventor(s) agree(s) to execute all papers necessary in connection w th 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 ooperate 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 conver 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. 3',550, and David J. Rosmann, Registration No. 43,059, of Broadcom Corporation, 16215 Alton Parkway, Irvine, C 4 92618-3616, and Robert Greene Sterne, Esquire, Registration No. 28,912; Edward J. Kessler, Esquire, Registratic 1No. 25,688; Jorge A. Goldstein, Esquire, Registration No. 29,021; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert

Page 1 of 2

W. Esmond, Esquire, Registration No. 32,893; Tracy-Gene G. Durkin, Esquire, Registration No. 32,831; Michael A. Cimbala, Esquire, Registration No. 33,851; Michael B. Ray, Esquire, Registration No. 33,99°; 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 Fobert C. Millonig, Esquire, Registration No. 34,395, all of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 Lew York Avenue, N.W., Suite 600, Washington, D.C. 20005-3934, power to insert in this assignment any furthe 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:	(1) 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:

- (a) in the invention(s) known as Receiver Having Decisional Feedback Equalizer With Remodulation and Related Methods for which application(s) for patent in the United States of America has (have) been executed by the undersigned on (1)

 (2) (3) 8-12-02 (4) (also known as United States Application No. 10/163,871, filed June 7, 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), a id 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, expensions, 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 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.

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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 conf ict therewith.

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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: (3) Fang LU	
Date:	Signature of Inventor:	

ASSIGNMENT

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

(a) in the invention(s) known as Receiver Having Decisional Feedback Equalizer Witl Remodulation and Related Methods for which application(s) for parent in the United States of America has (have) been executed by the undessigned on (1) (d) 919162. (also known as United State Application No. 19/163.871, filed June 7, 2002), in any and all applications thereon, in any are all Letters Patent(s) therefor, and

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- (b) in any and all applications that claim the benefit of the patent application listed above in par (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
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Page 1 of 2

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Date:		Signature of Inventor:	(1) Thomes D. KWON
Date:		Signature of Inventor:	(2) Jonathan S. MIN
Date:		Signature of Inventor;	(3) Fang LU
Date:	09 Sep 2002	Signature of Inventor:	Thomas J. Kolder

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RECORDED: 09/10/2002

Page 2 of 2

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