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Correspond	ient Name and Addres	S Area Code and T	felephone Number	(512) 825-1145
Name (line 1)	Shayne X. Short, Ph.D.			
Name (line 2)				
Address	P.O. Box 160727			
Address	Austin	ТХ	78716-0727	
	City	State/Country	Zip Code	
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ASSIGNMENT

WHEREAS, the undersigned inventors, hereinafter called the "Assignors", have invented a new and useful invention entitled:

MULTI-BAND SINGLE-CARRIER MODULATION

for which reference a full description is here made in an application for Letters Patent of the United States filed herewith.

WHEREAS,Broadcom Corporation, aUSAcompany having a principal office and placeof business at,16215 Alton ParkwayIrvineCalifornia92618-7013hereinafter called the "Assignee", is desirous of acquiring the entire right, title and interest in and to saidinvention, the application above identified, and in, to and under Letters Patent which may be obtainedfor said invention, as hereinafter more fully set forth;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for valuable legally sufficient consideration, the receipt of which by the Assignors from the Assignee is hereby acknowledged, the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the Assignee, its successors and assigns, the entire right, title and interest in and to the invention and the application herein above identified, and all Letters Patents that may issue for the said invention, and all division, reissues, substitutions, continuations, and extensions thereof, to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns to the full end of the term for which any and all of said Letters Patents for the said invention may issue.

FURTHER, be it known that the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the Assignee, its successors and assigns, the entire foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention, and further agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

And the Assignors do hereby covenant and agree, for themselves and their legal representatives, that they will assist the Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the Assignee may elect to make covering the invention herein identified, as herein before set forth, including any application for reissue, application for reexamination, application for foreign patent rights, or any proceeding in the United States Patent and Trademark Office affecting the invention, investing in the Assignee exclusive title in and to all such other applications and Letters Patent; and in the prosecution of any interference—which may arise involving said invention, or any application or Letters Patents herein—eontemplated; that they will promptly execute and deliver to the Assignee any and all additional-

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papers and make all lawful oaths which may be requested by the Assignee to fully earry out theterms of this assignment; and further that they will communicate to Assignee, or to its successors, ... assigns, and legal representatives, and facts known respecting said invention, and at the expenseof the Assignee, testify in any legal proceedings, and generally do everything possible to aid the Assignee, its successors, assigns and nominees to obtain and enforce proper patent protection – for said invention in all countries.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent to the Assignee in accordance with the terms of the assignment.

IN TESTIMONY WHEREOF, the Assignors have hereunto set their hands on the date indicated below.

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Sin Og	6-10-04	
Eric J. Ojard	date	date
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ASSIGNMENT

WHEREAS, the undersigned inventors, hereinafter called the "Assignors", have invented a new and useful invention entitled:

MULTI-BAND SINGLE-CARRIER MODULATION

for which reference a full description is here made in an application for Letters Patent of the United States filed herewith.

WHEREAS,Broadcom Corporation, aUSAcompany having a principal office and placeof business at,16215 Alton ParkwayIrvineCalifornia92618-7013hereinafter called the "Assignee", is desirous of acquiring the entire right, title and interest in and to saidinvention, the application above identified, and in, to and under Letters Patent which may be obtainedfor said invention, as hereinafter more fully set forth;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for valuable legally sufficient consideration, the receipt of which by the Assignors from the Assignee is hereby acknowledged, the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the Assignee, its successors and assigns, the entire right, title and interest in and to the invention and the application herein above identified, and all Letters Patents that may issue for the said invention, and all division, reissues, substitutions, continuations, and extensions thereof, to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns to the full end of the term for which any and all of said Letters Patents for the said invention may issue.

FURTHER, be it known that the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the Assignee, its successors and assigns, the entire foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention, and further agrees to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

And the Assignors do hereby covenant and agree, for themselves and their legal representatives, that they will assist the Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the Assignee may elect to make covering the invention herein identified, as herein before set forth, including any application for reissue, application for reexamination, application for foreign patent rights, or any proceeding in the United States Patent and Trademark Office affecting the invention, investing in the Assignee exclusive title in and to all such other applications and Letters Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Letters Patents herein - contemplated; that they will promptly execute and deliver to the Assignee any and all additional-

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papers and make all lawful oaths which may be requested by the Assignee to fully carry out the terms of this assignment; and further that they will communicate to Assignee, or to its successors, assigns, and legal representatives, and facts known respecting said invention, and at the expense of the Assignee, testify in any legal proceedings, and generally do everything possible to aid the Assignee, its successors, assigns and nominees to obtain and enforce proper patent-protection for said invention in all countries.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all Letters Patent to the Assignee in accordance with the terms of the assignment.

IN TESTIMONY WHEREOF, the Assignors have hereunto set their hands on the date indicated below.

6-10-04 Eric J. Ojard

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date

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