PATENT ASSIGNMENT

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SUBMISSION TYPE:		NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT			
CONVEYING PARTY DATA					
		N	lame	Execution Date	
Ryan Hirth				11/02/2012	
Mark Griswold				11/02/2012	
RECEIVING PARTY DATA					
Name:	Name: BROADCOM CORPORATION				
Street Address:	5300 California Avenue				
City:	Irvine				
State/Country:	CALIFORNIA				
Postal Code:	92617				
PROPERTY NUMBERS Total: 1					
Property Type			Number		6
Application Number: 13669		13669	272		13669272
CORRESPONDENCE DATA					
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Correspondence will be sent via US Mail when the fax attempt is unsuccessful.					
Phone: 9498510633 Email: mweipdocket@mwe.com					CH CH
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Address Line 4: Irvine, CALIFORNIA 92614					
ATTORNEY DOCKET NUMBER:			090850-0030		
NAME OF SUBMITTER:		Andrew D. Mickelsen, Reg. No. 50,957			
Total Attachments: 2 source=090850-0030_Assignmnet#page1.tif source=090850-0030_Assignmnet#page2.tif PATENT					

Docket No.: 090850-0030

<u>ASSIGNMENT</u>

WHEREAS We, Ryan HIRTH of 318 Spring Beauty Ct., Windsor, California 95492, and Mark GRISWOLD of 151 Mary Beth Ct., Fremont, California 94539, have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled DATA RATE CONTROL IN AN OPTICAL LINE TERMINAL, which was filed on November 5, 2012 _____, and identified by United States Patent Application No. 13/669.272 ______, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and the application number of said application when known;

AND WHEREAS, BROADCOM CORPORATION, a corporation of California and having an address of 5300 California Avenue, Irvine, California 92617, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, we do hereby sell, assign, transfer and set over unto Broadcom Corporation, its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including the right of priority and including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, we hereby agree with the said assignee that we will not execute any writing or do any act whatsoever conflicting with these presents, and that we will, at any time upon request, without further or additional consideration but at the expense of said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and assignee;

AND we request the Commissioner for Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to said Broadcom Corporation, its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

Date

Ryan HIRTH

Date

Mark GRISWOLD

DM_US 39518846-1.090850.0030

PATENT REEL: 029259 FRAME: 0515

Docket No.: 090850-0030

<u>ASSIGNMENT</u>

WHEREAS We, Ryan HIRTH of 318 Spring Beauty Ct., Windsor, California 95492, and Mark GRISWOLD of 151 Mary Beth Ct., Fremont, California 94539, have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled DATA RATE CONTROL IN AN OPTICAL LINE TERMINAL, which was filed on <u>November 5, 2012</u>, and identified by United States Patent Application No. <u>13/669,272</u>, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and the application number of said application when known;

AND WHEREAS, BROADCOM CORPORATION, a corporation of California and having an address of 5300 California Avenue, Irvine, California 92617, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, we do hereby sell, assign, transfer and set over unto Broadcom Corporation, its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including the right of priority and including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, we hereby agree with the said assignee that we will not execute any writing or do any act whatsoever conflicting with these presents, and that we will, at any time upon request, without further or additional consideration but at the expense of said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and assignee;

AND we request the Commissioner for Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to said Broadcom Corporation, its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

Date 2/2012

Ryan HIRTH

Mark GRISWOLD

DM_US 39518846-1.090850.0030

PATENT REEL: 029259 FRAME: 0516

RECORDED: 11/07/2012