10/04/2012 502084561

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Saiyiu Duncan Ho	09/18/2012
Bibhu Prasad Mohanty	09/18/2012
Etan Gur Cohen	09/18/2012
Rahul Malik	09/05/2012
Randall Coleman Gellens	09/04/2012
Rohit Kapoor	09/13/2012

RECEIVING PARTY DATA

Name:	Qualcomm Atheros, Inc.	
Street Address:	1700 Technology Drive	
City:	San Jose	
State/Country:	CALIFORNIA	
Postal Code:	95110	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13599715

CORRESPONDENCE DATA

Fax Number: 2817544914

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

281-758-0025 Phone:

btalash@deliziogilliam.com Email:

Correspondent Name: Andrew DeLizio Address Line 1: 15201 Mason Road Address Line 2: Suite 1000-312

Address Line 4: Cypress, TEXAS 77433

ATTORNEY DOCKET NUMBER: 113258

PATENT

REEL: 029078 FRAME: 0145

502084561

NAME OF SUBMITTER:	Becky Talash	
Total Attachments: 8		
source=113258_SignedAssignment#page1.	tif	
source=113258_SignedAssignment#page2.	tif	
source=113258_SignedAssignment#page3.tif		
source=113258_SignedAssignment#page4.tif		
source=113258_SignedAssignment#page5.	tif	
source=113258_SignedAssignment#page6.tif		
source=113258_SignedAssignment#page7.tif		
source=113258_SignedAssignment#page8.	tif	

ASSIGNMENT

WHEREAS, WE,

- 1. Saiyin Duncan HO, a citizen of Canada, having a mailing address located at 1700 Technology Drive, San Jose, California 95110, and a resident of San Diego, California,
- 2. **Bibbu Prasad MOHANTY**, a citizen of United States of America, having a mailing address located at 1700 Technology Drive, San Jose, California 95110, and a resident of San Diego, California,
- 3. Etan Gur COHEN, a citizen of United States of America, having a mailing address located at 1700 Technology Drive, San Jose, California 95110, and a resident of San Francisco, California,
- 4. Rahul MALIK, a citizen of India, having a mailing address located at 1700 Technology Drive, San Jose, California 95110, and a resident of Marathahallli, Bangalore,
- 5. Randall Coleman GELLENS, a citizen of United States of America, having a mailing address located at 1700 Technology Drive, San Jose, California 95110, and a resident of San Diego, California,
- 6. Rohit KAPOOR, a citizen of India. Having a mailing address located at 1700 Technology Drive, San Jose, California 95110, and a resident of San Diego, California,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to TOPOLOGY DISCOVERY IN A HYBRID NETWORK (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, Qualcomm Atheros, Inc. (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 1700 Technology Drive, San Jose, California 95110, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No(s). 13/599,715 filed August 30, 2012, Qualcomm Reference No. 113258, and all provisional applications relating thereto, together

QUALCOMM Ref. No. 113258

Page 2 of 3

with U.S. Provisional Application No(s). 61/529,224, filed August 30, 2011, Qualcomm Reference No. 113258P1, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

QUALCOMM Ref. No. 113258

Page 3 of 3

AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at,	<u>Sandiess, ch ii A</u>	, on <u>LAC 18, 12</u>	Saivin Durican HO
	LOCATION	DATE	Saiyiu Duncan HO
Done at		on	
	LOCATION	DATE	Bibhu Prasad MOHANTY
Done at		On	
	LOCATION	DATE	Etan Gur COHEN
Done at		on	
	LOCATION	DATE	Rahul MALIK
Done at _		On	
	LOCATION	DATE	Randall Coleman GELLENS
Done at _		on	
	LOCATION	DATE	Robit KAPOOD

Done at		, on	
	LOCATION	on DATE	Saiyiu Duncan HO
Done at	San Diego	, on 09 18 2	012 Dohn Mohms.
· · · · · · · · · · · · · · · · · · ·	LOCATION	DATE	Bibhu Prasad MOHANTY
Done at _	LOCATION	, on	Etan Gur COHEN
	#ochrion	Ditt	
Done at _		on DATE	
	LOCATION	DATE	Rahul MALIK
Done at		, on	
-	LOCATION	_, onDATE	Randall Coleman GELLENS
Done at		, on	
	LOCATION	, on	Rohit KAPOOR

QUALCOMM Ref. No. 113258

Page 3 of 3

AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	, or	t j	
	LOCATION	DATE	Saiyiu Duncan HO
Done at	, or	i i	
	LOCATION	DATE	Bibbu Prasad MOHANTY
Done at	SAN JOSE, CA , or	1 9/18/2012	Etan Gur COHEN
	LOCATION	DATE	Etań Gur COHEN
Done at	, or	1 ,	· .
	LOCATION	DATE	Rahul MALIK
Done at	, or	1	
	LOCATION	DATE	Randall Coleman GELLENS
Done at	, or	1	Robit KAPOOR
	LOCATION	DATE	Robit KAPOOR

Done at		, on	
	LOCATION	DATE	Saiyiu Duncan HO
Done at		, on	
•	LOCATION	DATE.	Bibhu Prasad MOHANTY
Done at		, on	
	LOCATION	DATE	Etan Gur COHEN
Done at	Bangalore	_, on Sptember 5, 2012	Elmet
Ŷ	LOCATION	DATE	Rahul MALIK
Done at		, on	
	LOCATION	DATE	Randall Coleman GELLENS
Done at		_, on	
•	LOCATION	DATE	Rohit KAPOOR

Done at	, on		
	LOCATION	DATE	Saiyiu Duncan HO
Done at _	, on		
	LOCATION	DATE	Bibhu Prasad MOHANTY
Done at	, on		
	LOCATION	DATE	Etan Gur COHEN
Done at	, on		•
	LOCATION	DATE	Rahul MALIK
Done at ≲	<u>andreworch</u> , on toe	r 4, 2012	- Den J. Germi Giller
	LOCATION	DATE	Randall Coleman GELLENS
Done at _	, on		
	LOCATION	DATE	Robit KAPOOR

Do	ne at,	on	
	LOCATION	DATE	Saiyiu Duncan HO
Dor	ne at, C	on .	
	LOCATION	DATE	Bibhu Prasad MOHANTY
Dor	ne at, c	on	
	LOCATION	DATE	Etan Gur COHEN
Dor	ne at , c	ın	
	LOCATION	DATE	Rahul MALIK
Don	ne at, o	n a	
	LOCATION	DATE	Randall Coleman GELLENS
Don	eat <u>san picho</u> ,o	n 09/13/2012	Relitator
a de la companya de	LOCATION	DATE	Rohit KAPOOR

PATENT REEL: 029078 FRAME: 0154

RECORDED: 10/04/2012