502941502 08/19/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2988100

SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYA	ICE:	ASSIGNMENT	
CONVEYING PARTY D	ΑΤΑ		
		Name	Execution Date
BRIAN LEIBOWITZ	01/05/2010		
HAE-CHANG LEE			01/28/2010
FARSHID ARYANFAR			01/28/2010
KUN-YUNG CHANG			01/05/2010
JIE SHEN			01/05/2010
RECEIVING PARTY DA	 TA		
Name:	Rambus	s Inc.	
Street Address:	1050 Er	nterprise Way, Suite 700	
City:	Sunnyv	ale	
State/Country:	CALIFC	PRNIA	
Postal Code:	94089		
PROPERTY NUMBERS	Total: 1		
Property Type		Number	
Application Number:	14452187		
CORRESPONDENCE D	ATA		
Fax Number:			
Correspondence will b		the e-mail address first; if that is	
Correspondence will be using a fax number, if p	provided	; if that is unsuccessful, it will be s	
<i>Correspondence will be using a fax number, if p</i> Phone:	provided ,	<i>; if that is unsuccessful, it will be</i> : 408-462-8000	
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Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	brovided 1 -	1; if that is unsuccessful, it will be s 408-462-8000 twain@rambus.com TARISA WAIN 1050 ENTERPRISE WAY #700	
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ASSIGNMENT OF PROVISIONAL PATENT APPLICATION

JOINT

WHEREAS, Brian Leibowitz, of 425 14th Street #4, San Francisco, CA 94103; Hae-Chang Lee, of 971 Seena Ave., Los Altos, CA 94024; Farshid Aryanfar, of 1000 Escalon Ave., Apt. #1057, Sunnyvale, CA 94085; Kun-Yung Chang, of 296 Ramon Drive, Los Altos, CA 94024; and Jie Shen, 43485 Bryant Street, Fremont, CA 94539; hereinafter referred to as "Assignors," are the inventors of any and all new and useful improvements described and set forth in the below-identified United States provisional patent application (hereinafter referred to as "Said Patent Application"):

Title of Provisional Patent Application: Techniques for Phase Detection

Filing Date: November 12, 2009

Application No.: 61/260,797

WHEREAS, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by Assignors, Assignors hereby sell, assign, and transfer to **Rambus Inc.**, a Corporation of Delaware, having a principal place of business at 4440 El Camino Real, Los Altos, CA 94022, USA, (hereinafter referred to as "Assignee"), the entire right, title and interest in and to Said Patent Application, any and all improvements that are disclosed in Said Patent Application, and all foreign counterparts to Said Patent Application (including patent, utility model and industrial designs). The Assignors further sell, transfer, and assign to Assignee the entire right, title, and interest in any and all non-provisional applications, international applications, foreign applications, continuation applications, renewal applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original patents, reissued patents, registrations, reexamination certificates, and extensions, that have been or shall be filing of Said Patent Application; and to the right to file foreign applications directly in the name of Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties or otherwise.

The Assignors further agree that the Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the Assignors will execute all non-provisional applications, international applications, foreign applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all of said improvements; execute all rightful oaths, declarations, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to the Assignors relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee.

The Assignors covenant with the Assignee, its successors, and assigns that no assignment, grant, mortgage, license, lien, or other agreement affecting the rights and property herein conveyed has been made to others by the Assignors, and that full right to convey the same as herein expressed is possessed by the Assignors.

Assignment Attorney Docket No.: RA724.1

The Assignors hereby authorize and request the Officials of the United States Patent and Trademark Office and any and all foreign Patent Offices to issue any and all Letters Patents, when granted, to said Assignee as the assignee of the entire right, title, and interest in and to the same, for the sole use of said Assignee, its successors, and assigns, to the full end of the term for which said Letters Patents may be granted.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: ___//5/20(0

Brian Leibowitz

Dated:

Dated: ______/_2%/_2*10_

Dated: ______ (____ / ___ / 2.0 (0

Dated: 1/5/2010

Hae-Chang Lee

Farshid Aryanfar

Kun-Yung Chang

Jie Shen

Assignment Attorney Docket No.: RA724.1

The Assignors hereby authorize and request the Officials of the United States Patent and Trademark Office and any and all foreign Patent Offices to issue any and all Letters Patents, when granted, to said Assignee as the assignee of the entire right, title, and interest in and to the same, for the sole use of said Assignee, its successors, and assigns, to the full end of the term for which said Letters Patents may be granted.

Assignors hereby authorize and request The Law Office of Steven J. Cahill to insert herein above the application number, the dates of execution of declaration, and the filing date of Said Patent Application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated:

Dated: 1/28/10

Brian Leibowitz

Hae-Chang bee

Dated:

Farshid Aryanfar

Dated:

Kun-Yung Chang

Dated:

Jie Shen

Page 2 of 2

State of California		
County of SANTO CLAMENT		
On JAN 5 2010 before me,	DOROMARY L. LEW MONTH AND	
personally appeared	Name(s) of Signar(s)	

DOBOTHY L. LEVIN Commission # 1935908 Notary Public - California Santa Clara County My Comm. Expires Mar 10, 2013 who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/ara-subscribed to the within instrument and acknowledged to me that he/she/they-executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

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DOROTHY L. LEVIN Commission # 1835908 Notary Public - California Santa Clara County My Comm. Expires Mar 10, 2013

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who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are-subscribed to the within instrument and acknowledged to me that he/she/they-executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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State of California	
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	DORIDHARY C. LEMAN ROMANNEY MELCLIC.
personally appeared <u>Kun-Yung</u>	<u>СЛ Джусу</u> Name(s) of Signerits)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are-subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/hei/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Signature of Notary Public

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