

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3125334

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
FREDERICK A. WARE	07/07/2009
BRENT HAUKNES	07/07/2009
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Rambus Inc.
<b>Street Address:</b>	1050 Enterprise Way, Suite 700
<b>City:</b>	Sunnyvale
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94089
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14554904
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(408)877-3828
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	4086556375
<b>Email:</b>	marc@schuylerlawgroup.com
<b>Correspondent Name:</b>	MARC SCHUYLER
<b>Address Line 1:</b>	PO BOX 2535
<b>Address Line 4:</b>	SARATOGA, CALIFORNIA 95070
<b>ATTORNEY DOCKET NUMBER:</b>	2014073 / RA672PCTC1US
<b>NAME OF SUBMITTER:</b>	MARC P. SCHUYLER, REG. NO. 35675
<b>SIGNATURE:</b>	/Marc P. Schuyler/
<b>DATE SIGNED:</b>	11/26/2014
<b>Total Attachments: 3</b>	
source=AssignmentOnly#page1.tif	
source=AssignmentOnly#page2.tif	
source=AssignmentOnly#page3.tif	

**CORPORATE ASSIGNMENT**

WHEREAS, the undersigned,

Frederick A. Ware  
Brent Haukness

13961 Fremont Pines, Los Altos Hills, CA 94022  
17650 Eaton Lane, Monte Sereno, CA 95030

hereinafter termed "Inventor(s)", have invented certain new and useful improvements in

*PROTOCOL FOR REFRESH BETWEEN A MEMORY CONTROLLER AND A MEMORY DEVICE*

and have executed a declaration or oath for an application for a United States patent disclosing and identifying the invention:

\_\_\_ On the \_\_\_ day of \_\_\_\_\_, 20\_\_\_;

Or

Said application having Application Number 61/171,576 and filed on 22 April 2009; and

WHEREAS, RAMBUS INC., a corporation of the State of Delaware, having a place of business at 4440 El Camino Real, Los Altos, CA 94022, (hereinafter termed "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered jointly or severally by said Inventor(s) (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventor(s) to have been received in full from said Assignee:

1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.

2. Said Inventor(s) hereby jointly and severally covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Inventor(s) shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (e) for interference or other priority proceedings involving said invention; and (f) for legal proceedings involving said invention and any applications therefor and any patents granted

thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee.

3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns.

4. Said Inventor(s) hereby jointly and severally warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, said Inventors have executed and delivered this instrument to said Assignee as of the dates written below.

Frederick A. Ware

7-7-09

Date

State of CALIFORNIA )  
County of SANTA CLARA )

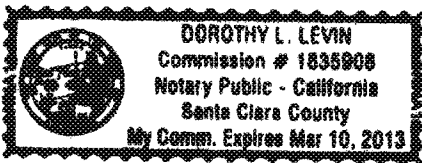
On July 7, 2009 before me, Dorothy L. Levin, Notary Public personally appeared Frederick A. Ware,

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.

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

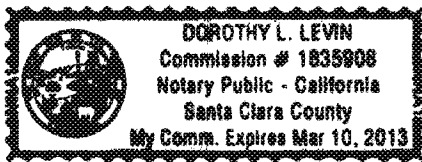
WITNESS my hand and official seal.

(Signature of Notary Public)



Brent Haukness  
Brent Haukness

7/7/09  
Date



State of CALIFORNIA )  
County of Santa Clara )

On July 7, 2009 before me, Dorothy L. Levin, Notary Public personally appeared Brent Haukness, 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.

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.

Dorothy L. Levin  
(Signature of Notary Public)

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ )

\_\_\_\_\_  
Date

On \_\_\_\_\_, before me, \_\_\_\_\_, personally appeared \_\_\_\_\_, 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.

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 of Notary Public)