

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2607527

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>FREDERICK A. WARE</td> <td>07/19/2012</td> </tr> <tr> <td>BRENT HAUKNES</td> <td>07/17/2012</td> </tr> <tr> <td>IAN P. SHAEFFER</td> <td>08/02/2012</td> </tr> <tr> <td>JAMES E. HARRIS</td> <td>07/13/2012</td> </tr> </tbody> </table>		Name	Execution Date	FREDERICK A. WARE	07/19/2012	BRENT HAUKNES	07/17/2012	IAN P. SHAEFFER	08/02/2012	JAMES E. HARRIS	07/13/2012
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Rambus Inc.</td> </tr> <tr> <td>Street Address:</td> <td>1050 Enterprise Way, Suite 700</td> </tr> <tr> <td>City:</td> <td>Sunnyvale</td> </tr> <tr> <td>State/Country:</td> <td>CALIFORNIA</td> </tr> <tr> <td>Postal Code:</td> <td>94089</td> </tr> </table>		Name:	Rambus Inc.	Street Address:	1050 Enterprise Way, Suite 700	City:	Sunnyvale	State/Country:	CALIFORNIA	Postal Code:	94089
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
Fax Number:	(650)938-5200										
Phone:	6509888500										
Email:	rhancock@fenwick.com										
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>											
Correspondent Name:	FENWICK & WEST LLP										
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Address Line 2:	ATTN FRANK YANG										
Address Line 4:	MOUNTAIN VIEW, CALIFORNIA 94041										
ATTORNEY DOCKET NUMBER:	28178-24066										
NAME OF SUBMITTER:	FRANK YANG, REG. NO. 65788										

Signature:	/Frank Yang/
Date:	11/07/2013
Total Attachments: 4 source=24066 US Assignment#page1.tif source=24066 US Assignment#page2.tif source=24066 US Assignment#page3.tif source=24066 US Assignment#page4.tif	

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and pursuant to my obligation to Rambus Inc. and/or its affiliates to assign intellectual property, and pursuant to any other applicable agreements regarding the assignment of intellectual property among Rambus Inc. and its affiliates, I, as one of the person(s) named below

Frederick A. Ware of Los Altos Hills, CA
Brent Haukness of Monte Sereno, CA
Ian P. Shaeffer of Los Gatos, CA
James E. Harris of San Jose, CA

have sold, assigned, and transferred and/or I do hereby sell, assign, and transfer to **Rambus Inc., a Delaware corporation having a place of business at 1050 Enterprise Way, Suite 700, Sunnyvale CA 94089** ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. My entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the patent application ("APPLICATION") titled **"Reducing Memory Refresh Exit Time"**, having:

- X United States provisional Patent Application No. **61/671,035**, filed on **July 12, 2012**;
- which claims priority to U.S. Patent Application No. [Enter APPLICATION NUMBER] filed on [Enter DATE] ; or
- Application number (_____), filed (_____), inserted by (_____) on (_____), initials (_____)
[Where I hereby authorize and request ASSIGNEE or its agents to insert here in each parentheses the application number and filing date when known, along with the printed name, date, and signed initials of the person completing this section].

2. The entire worldwide right, title, and interest in and to: (a) the APPLICATION; (b) all applications claiming priority from the APPLICATION; (c) all provisional, utility, utility model, design, divisional, continuation, continued prosecution, continuation-in-part, substitute, renewal, and other applications related thereto which have been or may be filed in the United States or elsewhere in the world related to the SUBJECT MATTER; (d) all patents (including reissues, re-examinations, and extensions) which may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

I agree that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

As part of this Assignment, I further agree to do the following, when requested, and without further consideration: (1) execute all oaths, declarations, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and

enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests conveyed. I further agree to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

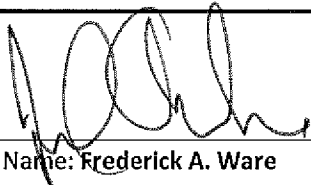
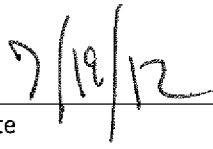

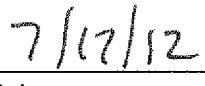
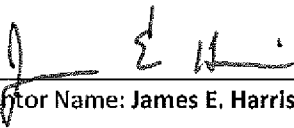
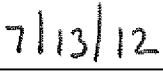
I represent that I had or still have the right, title, and interest to convey as set forth herein, and covenant with ASSIGNEE that I have not made and will not make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests conveyed.

I grant ASSIGNEE or its agents the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

The terms and covenants of this Assignment shall inure to the benefit of ASSIGNEE, its successors, assigns, and legal representatives, and shall be binding upon me, and my heirs, legal representatives and assigns.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

Each Inventor: Please Sign and Date Below:

 _____ Inventor Name: Frederick A. Ware	 _____ Date
 _____ Inventor Name: Brent Haukness	 _____ Date
_____ Inventor Name: Ian P. Shaeffer	_____ Date
 _____ Inventor Name: James E. Harris	 _____ Date

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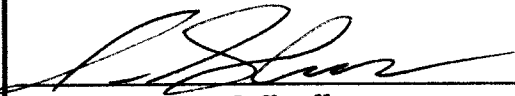
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 Inventor Name: Ian P. Shaeffer	8/2/12 Date
Inventor Name: James E. Harris	Date