

10-12-2004

Form PTO-1595 (Rev. 06/04)  
OMB No. 0651-0027 (exp. 6/30/2005)U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

102856234

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)/Execution Date(s):**

- |                    |                        |
|--------------------|------------------------|
| 1. Steven Woo      | 4. Wayne S. Richardson |
| 2. Michael Ching   | 5. Kurt T. Knorpp      |
| 3. Chad A. Bellows | 6. Jun Kim             |

1. Sept. 28, 2004 4. Sept. 28, 2004

2. Sept. 30, 2004 5. Sept. 28, 2004

Execution Date(s) 3. Sept. 28, 2004 6. Sept. 28, 2004

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No**3. Nature of conveyance:**

- ☒ Assignment ☐ Merger
- ☐ Security Agreement ☐ Change of Name
- ☐ Government Interest Assignment
- ☐ Executive Order 9424, Confirmatory License
- ☐ Other \_\_\_\_\_

**2. Name and address of receiving party(ies)**Name: Rambus Inc.

Internal Address: \_\_\_\_\_

Street Address: 4440 El Camino RealCity: Los AltosState: CaliforniaCountry: U.S.A.Zip: 94022Additional name(s) & address(es) attached? ☐ Yes ☒ No**4. Application or patent number(s):**

This document is being filed together with a new application.

A. Patent Application No.(s) 10954941

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No**5. Name and address to whom correspondence concerning document should be mailed:**Name: Kirk J. DeNiro, Esq.

Internal Address: \_\_\_\_\_

Vierra Magen Marcus Harmon & DeNiro LLP

Street Address: \_\_\_\_\_

685 Market Street, Suite 540City: San FranciscoState: CA Zip: 94105Phone Number: 415-369-9660Fax Number: 415-369-9665Email Address: kdeniro@vmmhd.com**6. Total number of applications and patents involved:**1**7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40**

- ☐ Authorized to be charged by credit card
- ☐ Authorized to be charged to deposit account
- ☒ Enclosed
- ☐ None required (government interest not affecting title)

**8. Payment Information**a. Credit Card Last 4 Numbers \_\_\_\_\_  
Expiration Date \_\_\_\_\_b. Deposit Account Number 501826

Authorized User Name \_\_\_\_\_

**9. Signature:**

Signature

Date

Kirk J. DeNiro

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 9

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:

Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

10/05/2004 DENMANU1 00000022 10954941

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40.00 DP

PATENT  
REEL: 015866 FRAME: 0615

**JOINT TO CORPORATE ASSIGNMENT**

WHEREAS, the undersigned Inventors:

- (1) Steven Woo, a resident of 12180 Country Squire Lane, Saratoga, California 95070;
- (2) Michael Ching, a resident of 1621 Pinehurst Drive, Los Altos, California 94022;
- (3) Chad A. Bellows, a resident of 509 Burlingame Avenue, Burlingame, California 94010;
- (4) Wayne S. Richardson, a resident of 11890 Walbrook Drive, Saratoga, California 95070;
- (5) Kurt T. Knorpp, a resident of 12 Michael Court, San Carlos, California 94070; and
- (6) Jun Kim, a resident of 24086 Princess Elleena Court, Los Altos Hills, California 94024,

have invented certain new and useful improvements in:

**AN INTEGRATED CIRCUIT MEMORY SYSTEM HAVING  
DYNAMIC MEMORY BANK COUNT AND PAGE SIZE**

and have executed a declaration for an application for a United States Patent disclosing and identifying the invention:

1. X The Declaration for the application for the United States patent being executed on 9/28/04, 9/30/04;
- Or
2.    Said application having Application Number            and filed on the       <sup>th</sup> day of                   , 200  .

WHEREAS Rambus Inc. (hereinafter termed "Assignee"), a corporation of the State of Delaware, having a place of business at 4440 El Camino Real, Los Altos, State of California, wishes to acquire 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 Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, certificates of invention and other forms of protection thereon (hereinafter termed "patents") applied for or granted in the United States and/or other countries.

NOW THEREFORE, for good and valuable consideration acknowledged by each of said Inventors to have been received in full from said Assignee:

1. Said Inventors do hereby sell, assign, transfer and convey to 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 in any or all countries of the world for patents, certificates of inventions or other governmental grants on said invention, including the right to apply for patents pursuant to the International Convention for the Protection of Industrial Property or pursuant to any other convention, treaty, agreement or understanding; (c) in and to any and all applications filed and any and all patents, certificates of inventions or other governmental grants granted on said invention in the United States or any other country, including each and every application filed and each and every patent granted on any application which is a division, substitution, or continuation of any of said applications; (d) in and to each and every reissue or extension of any of said patents; and (e) in and to each and every patent claim resulting from a reexamination certificate for any and all of said patents.

2. Said Inventors 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 other countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, executing 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 complying with any duty of disclosure; (c) for prosecuting any of said applications; (d) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (e) for filing and prosecuting applications for reissue of any of said patents; (f) for interference or other priority proceedings involving said invention; and (g) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, reexamination proceedings, compulsory licensing proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventors 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 Inventors, their respective heirs, legal representatives and assigns.

4. Said Inventors 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, the said Inventors have executed this instrument on the date of acknowledgement before the Notary Public as given below and delivered this instrument to said Assignee:

(1)   
Steven Woo

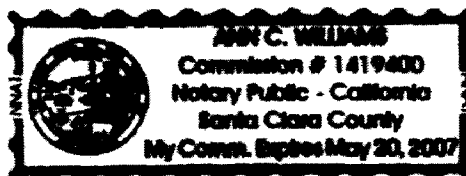
State of California  
County of Santa Clara

On 9/28/2004 before me, Ann C. Williams, Notary Public,  
(name and title of officer)

personally appeared Steven Woo, personally known to me ~~(or 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.

WITNESS my hand and official seal.

Signature 



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(2) Michael Ching  
Michael Ching

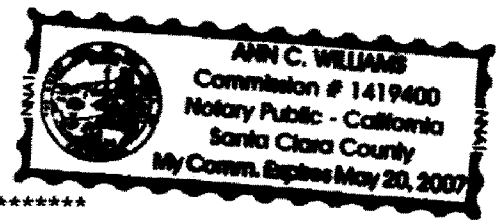
State of California )  
County of Santa Clara )

On 9/30/04 before me, Ann C. Williams, Notary Public,  
(name and title of officer)

personally appeared Michael Ching, personally known to me ~~(or 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.

WITNESS my hand and official seal.

Signature Ann C. Williams



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(3) Chad A. Bellows  
Chad A. Bellows

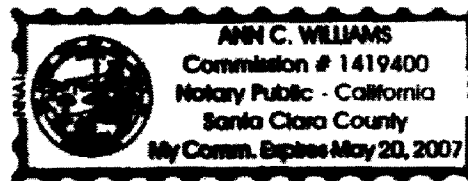
State of California  
County of Santa Clara

On 9/28/04 before me, Ann C. Williams, Notary Public,  
(name and title of officer)

personally appeared Chad A. Bellows, personally known to me (~~or 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.

WITNESS my hand and official seal.

Signature Ann C. Williams



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(4) Wayne S. Richardson  
Wayne S. Richardson

State of California

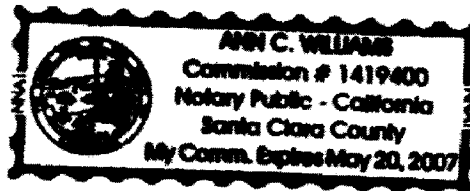
County of Santa Clara

On 9/28/2004 before me, Ann C. Williams, Notary Public,  
(name and title of officer)

personally appeared Wayne S. Richardson, personally known to me (~~or 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.

WITNESS my hand and official seal.

Signature Ann C. Williams



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(5) Kurt T. Knorpp  
Kurt T. Knorpp

State of California

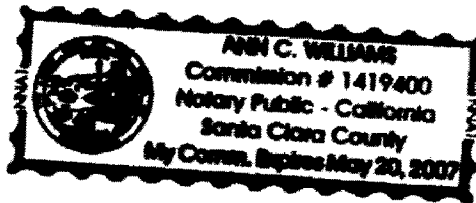
County of Santa Clara

On 9/28/04 before me, Ann C. Williams, Notary Public,  
(name and title of officer)

personally appeared Kurt T. Knorpp, personally known to me (~~or 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.

WITNESS my hand and official seal.

Signature Ann C. Williams



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(6)

Jun Kim  
Jun Kim

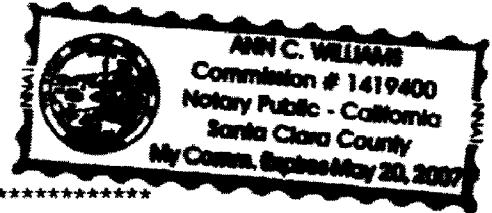
State of California  
County of Santa Clara

On 9/28/04 before me, Ann C. Williams, Notary Public,  
(name and title of officer)

personally appeared Jun Kim, personally known to me (~~or 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.

WITNESS my hand and official seal.

Signature Ann C. Williams



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