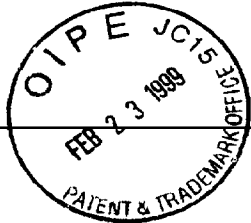


03-11-1999



100979871

Attorney Docket Number
9797-0030-999



TO THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS
Box Assignment
Washington, DC 20231

Please record the attached original documents or copy thereof.

MAD 2-23-99

<p>1. Name of conveying party(ies): ELY K. TSERN RICHARD M. BARTH CRAIG E. HAMPEL</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies):</p> <p>Name: <u>RAMBUS, INC.</u></p> <p>Address: <u>2465 Latham Street</u> <u>Mountain View, CA 94040</u></p> <p>Country (if other than USA): _____</p>
<p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger</p> <p><input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other _____</p> <p>Execution Date: <u>January 14, 1999 & January 22, 1999</u></p>	<p>4. Application number(s) or patent number(s):</p> <p>If this document is being filed together with a new application, the execution date of the application is: _____</p> <p>A. Patent Application No.(s) <u>09/169,376</u> B. Patent No.(s) _____</p> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>PENNIE & EDMONDS LLP 1155 Avenue of the Americas New York, NY 10036</p>	<p>6. Number of applications and patents involved: <u>one</u></p> <p>7. Total fee (37 CFR 3.41):.....\$ <u>40.00</u> Please charge to the deposit account listed in Section 8.</p> <p>8. Deposit account number: <u>16-1150 (9797-0030-999)</u></p>

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Gary S. Williams 31,066 *Gary S Williams* February 18, 1999

Name of Person Signing Reg. No. Signature Date

Total number of pages including cover sheet: 3

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignment
Washington, D.C. 20231

ASSIGNMENT

WHEREAS WE, **Ely K. Tsern**, a resident of Los Altos, California; **Richard M. Barth**, a resident of Palo Alto, California; **Paul G. Davis**, a resident of San Jose, California; and **Craig E. Hampel**, a resident of San Jose, California; have invented certain new and useful improvements in a **DRAM CORE REFRESH WITH REDUCED SPIKE CURRENT**, having **Serial No. 09/169,376**, and **filing date of October 9, 1998**, and which invention is fully described in the specification pertaining to said application; and

Whereas, **RAMBUS, INC.**, a corporation of the State of **California**, and having its principal place of business at **2465 Latham Street, Mountain View, CA 940404** (hereinafter referred to as assignee) is desirous of acquiring the entire right, title, and interest in and to said invention, said application and the Letters Patent to be obtained therefore;

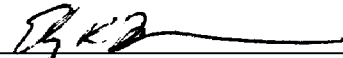
Now, therefore, for and in consideration of One Dollar and other good and valuable considerations, to us in hand paid, the receipt and sufficiency whereof are hereby acknowledged, we have sold assigned, and set over and by these presents do hereby sell, assign, and set over unto said assignee and said assignee's legal representatives, successors and assigns, the entire right, title, and interest in and to said invention, said application, and the Letters Patent, both foreign and domestic, that may or shall issue thereon; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to the above-mentioned assignee agreeably with the terms of this assignment.

We hereby authorize the above-mentioned assignee or its legal representative to insert in this instrument the filing date and serial number of our said application or any other information 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.

Upon said consideration, we convey to said assignee the right to make application in its own behalf for protection of said invention in countries foreign to the United States and where expedient to claim under the International Convention or other international arrangement for any such application the date of said United States application (or other application if any there be) in priority to other applications; and we do hereby covenant and agree with the said assignee that we will not execute any writing or do any act whatsoever conflicting with these presents, and that we will at any time upon request, without further or additional consideration, but at the expense of the said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional renewal, reissued or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or chose in action accruing as a result of such application or patents, by giving

testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of both parties.

Date: 12/14/98

By: 
Ely K. Tsern

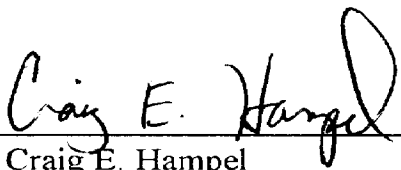
Date: 12-22-98

By: 
Richard M. Barth

Date: _____

By: _____
Paul G. Davis

Date: 12/14/98

By: 
Craig E. Hampel