

01-10-2006



103155677

RECORDATION FORM COVER SHEET  
PATENTS ONLY

Atty Ref/Docket No.: INT-038

Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Sridhar Lakshmanamurthy, Dharmin Y. Parikh, Karthik Vaithianathan, Gary Lavelle and Atul Kwatra

Additional name(s) of conveying party(ies) attached?

[ ] Yes [X] No

3. Nature of conveyance:

[X] Assignment

[ ] Merger

[ ] Security Agreement [ ] Change of Name

Execution Date: December 20, 2005, November 22, 2005, November 29, 2005, November 29, 2005, November 22, 2005

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

Name: Intel Corporation

Street Address: 2200 Mission College Blvd.

City: Santa Clara State: CA Zip: 95052

Additional name(s) & address(es) attached? [ ] Yes [X] No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is December 20, 2005, November 22, 2005, November 29, 2005, November 29, 2005, November 22, 2005:

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? [ ] Yes [X] No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Douglas J. Ryder

Address: Ryder IP Law  
C/O PortfolioIP  
P.O. Box 52050  
Minneapolis, MN 55402

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 40.00

[ ] Enclosed

[X] Authorized to be charged to deposit account  
50-3228

8. Please charge any additional fees or credit any over payments to our Deposit Account No.:

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.

Douglas J. Ryder/Reg. No. 43,073  
Name of Person Signing

Signature

Date

Total number of pages including cover sheet: 11

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks  
Mail Stop Assignment Recordation Services  
P.O. Box 1450  
Alexandria, VA 22313-1450

01/09/2006 DBYRNE 00000278 503228 11321273  
01 FC:8021 40.00 DA

112941 U.S. PTO  
11/321273



122905

PATENT  
REEL: 017425 FRAME: 0284

## ASSIGNMENT

WHEREAS, We, Sridhar Lakshmanamurthy, residing at 1614 Grosbeak Avenue, Sunnyvale, CA 94087, and Dharmin Y. Parikh, residing at 4909 W. Joshua Blvd., #2026, Chandler, AZ 85226, and Karthik Vaithianathan, residing at 2170 W. Shannon Street, Chandler, AZ 85224, and Gary Lavelle, residing at 34 Eagleton Farms Road, Newtown, PA 18940, and Atul Kwatra, residing at 2207 W. Remington Drive, Chandler, AZ 85248, made certain new and useful inventions and improvements for which we executed an application for Letters Patent of the United States on even date herewith, which is entitled MEMORY CONTROLLER WITH BANK SORTING AND SCHEDULING,

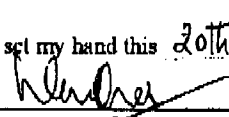
AND WHEREAS, Intel Corporation, a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 2200 Mission College Blvd., Santa Clara, CA 95052 (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor,

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

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

IN TESTIMONY WHEREOF, I have hereunto set my hand this 20th day of December, 2005.

  
Sridhar Lakshmanamurthy

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Dharmin Y. Parikh

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Karthik Vaithianathan

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Gary Lavelle

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Atul Kwatra

### ASSIGNMENT

WHEREAS, We, Sridhar Lakshmanamurthy, residing at 1614 Grosbeak Avenue, Sunnyvale, CA 94087, and Dharmin Y. Parikh, residing at 4909 W. Joshua Blvd., #2026, Chandler, AZ 85226, and Karthik Vaithianathan, residing at 2170 W. Shannon Street, Chandler, AZ 85224, and Gary Lavelle, residing at 34 Eagleton Farms Road, Newtown, PA 18940, and Atul Kwatra, residing at 2207 W. Remington Drive, Chandler, AZ 85248, made certain new and useful inventions and improvements for which we executed an application for Letters Patent of the United States on even date herewith, which is entitled MEMORY CONTROLLER WITH BANK SORTING AND SCHEDULING;

AND WHEREAS, Intel Corporation, a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 2200 Mission College Blvd., Santa Clara, CA 95052 (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

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Filing Date : even date herewith  
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AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

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IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Sridhar Lakshmanamurthy

IN TESTIMONY WHEREOF, I have hereunto set my hand this 22<sup>nd</sup> day of November, 2005.

Dy. Parikh  
\_\_\_\_\_  
Dharmin Y. Parikh

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Karthik Vaithianathan

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Gary Lavelle

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Atul Kwatra

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WHEREAS, We, Sridhar Lakshmanamurthy, residing at 1614 Grosbeak Avenue, Sunnyvale, CA 94087, and Dharmin Y. Parikh, residing at 4909 W. Joshua Blvd., #2026, Chandler, AZ 85226, and Karthik Vaithianathan, residing at 2170 W. Shannon Street, Chandler, AZ 85224, and Gary Lavelle, residing at 34 Eagleton Farms Road, Newtown, PA 18940, and Atul Kwatra, residing at 2207 W. Remington Drive, Chandler, AZ 85248, made certain new and useful inventions and improvements for which we executed an application for Letters Patent of the United States on even date herewith, which is entitled MEMORY CONTROLLER WITH BANK SORTING AND SCHEDULING;

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NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

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\_\_\_\_\_  
Sridhar Lakshmanamurthy

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Dharmin Y. Parikh

IN TESTIMONY WHEREOF, I have hereunto set my hand this 29 day of NOV, 2005.

  
\_\_\_\_\_  
Karthik Vaithianathan

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Gary Lavelle

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Atul Kwatra

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\_\_\_\_\_  
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\_\_\_\_\_  
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\_\_\_\_\_  
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\_\_\_\_\_  
Sridhar Lakshmanamurthy

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\_\_\_\_\_  
Dharmin Y. Parikh

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\_\_\_\_\_  
Karthik Vaithianathan

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\_\_\_\_\_  
Gary Lavelle

IN TESTIMONY WHEREOF, I have hereunto set my hand this 22<sup>nd</sup> day of NOVEMBER, 2005.

Atul Kwatra  
\_\_\_\_\_  
Atul Kwatra