

RECORDATION FORM COVER SHEET
PATENTS ONLY

Atty Ref/Docket No.: 884.G97US1

Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Sridhar R Tirumalai, Amir Bashir, Jing Li and Andrew M. Volk

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

☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement ☐ Change of Name☐ OtherExecution Date: March 30, 2006, March 30, 2006,
March 30, 2006, March 31, 2006

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

Name: Intel Corporation

Street Address: 2200 Mission College Blvd.

City: Santa Clara State: CA Zip: 95052Additional name(s) & address(es) attached? ☐ Yes ☒ 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:

A. Patent Application No.(s)

B. Patent No.(s)

Serial No. 11/396,041, filed March 31, 2006

Additional numbers attached? ☐ Yes ☒ No

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

Name: Viet V. Tong

Address:

Schwegman, Lundberg & Woessner, P.A.
P.O. Box 2938
Minneapolis, MN 55402-09386. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41): \$ 40.00☐ Enclosed☒ Authorized to be charged to deposit account
19-0743

8. Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743

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.

Viet V. Tong/Reg. No. 45,416

Name of Person Signing

Signature

Date

Total number of pages including cover sheet: 9

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

700351930

PATENT
REEL: 020184 FRAME: 0537

CH \$40.00 190743 11396041

ASSIGNMENT

WHEREAS, We, Sridhar R. Tirumalai, residing at 3600 W Ray Road # 2038, Chandler, AZ 85226, and Amir Bashir, residing at 3951 Ironwood Drive, El Dorado Hills, CA 95762, and Jing Li, residing at 1185 Eschelman CT, Folsom, CA 95630, and Andrew M. Volk, residing at 7380 Sierra Ponds Lane, Granite Bay, CA 95746, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States entitled FAST LOCK SCHEME FOR PHASE LOCKED LOOPS AND DELAY LOCKED LOOPS:

WHEREAS, We hereby authorize and request our attorneys, as listed on the Combined Declaration and Power of Attorney, at Schwegman, Lundberg, Woessner & Kluth, P.A., located at 121 South Eighth Street, Suite 1600, Minneapolis, MN 55402, to insert here in parentheses (Ser. No. 11/396,041; Filing Date: March 31, 2006) the filing date and application number of said application when known.

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.

PATENT

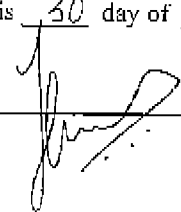
REEL: 020184 FRAME: 0538

Docket No: 884.G97US1
Page 2 of 2

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 30th day of March, 2006.



Sridhar R. Tirumalai

IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of _____, 2006.

Amir Bashir

IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of _____, 2006.

Jing Li

IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of _____, 2006.

Andrew M. Volk

Mar 30 06 07:02p

INTEL CSE

916 356 3051

p.6

ASSIGNMENT

WHEREAS, We, Sridhar R. Tirumalai, residing at 3600 W Ray Road # 2038, Chandler, AZ 85226, and Amir Bashir, residing at 3951 Ironwood Drive, El Dorado Hills, CA 95762, and Jing Li, residing at 1185 Eschelman CT, Folsom, CA 95630, and Andrew M. Volk, residing at 7380 Sierra Ponds Lane, Granite Bay, CA 95746, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States entitled FAST LOCK SCHEME FOR PHASE LOCKED LOOPS AND DELAY LOCKED LOOPS:

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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.

Amir
3/30/2006

PATENT

REEL: 020184 FRAME: 0540

Mar 30 06 07:02p

INTEL CSE

916 356 3051

p. 7

Docket No: 884.G97US1
Page 2 of 2

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 _____ day of _____, 2006.

Sridhar R. Tirumalai

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Amir Bashir

IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of _____, 2006.

Jing Li

IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of _____, 2006.

Andrew M. Volk

Andrew M. Volk
3/30/2006

PATENT

REEL: 020184 FRAME: 0541

MAR-29-2006 08:03

INTEL PCG GFX SW ENG

916 377 2024 P.06/07

ASSIGNMENT

WHEREAS, We, Sridhar R. Tirumalai, residing at 3600 W Ray Road # 2038, Chandler, AZ 85226, and Amir Bashir, residing at 3951 Ironwood Drive, El Dorado Hills, CA 95762, and Jing Li, residing at 1185 Eschelman CT, Folsom, CA 95630, and Andrew M. Volk, residing at 7380 Sicra Ponds Lane, Granite Bay, CA 95746, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States entitled FAST LOCK SCHEME FOR PHASE LOCKED LOOPS AND DELAY LOCKED LOOPS;

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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.

MAR-29-2006 08:04

INTEL PCG GFX SW ENG

916 377 2024 P.07/07

Docket No: 884.G97US)

Page 2 of 2

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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Sridhar R. Tirumalai

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Amir Bashir

IN TESTIMONY WHEREOF, I have hereunto set my hand this 30th day of March, 2006.



Jing Li

IN TESTIMONY WHEREOF, I have hereunto set my hand this _____ day of _____, 2006.

Andrew M. Volk

TOTAL P.07

PATENT
REEL: 020184 FRAME: 0543

31/03 2006 14:35 FAX

006

ASSIGNMENT

WHEREAS, We, Sridhar R. Tirumalai, residing at 3600 W Ray Road # 2038, Chandler, AZ 85226, and Amir Bashir, residing at 3951 Ironwood Drive, El Dorado Hills, CA 95762, and Jing Li, residing at 1185 Eschelman CT, Folsom, CA 95630, and Andrew M. Volk, residing at 7380 Sierra Ponds Lane, Granite Bay, CA 95746, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States entitled FAST LOCK SCHEME FOR PHASE LOCKED LOOPS AND DELAY LOCKED LOOPS:

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31/03 2006 14:36 FAX

007

Docket No: 884.G97US1
Page 2 of 2

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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Amir Bashir

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Jing Li

IN TESTIMONY WHEREOF, I have hereunto set my hand this 31 day of March, 2006.



Andrew M. Volk

SCHWEGMAN ■ LUNDBERG ■ WOESSNER
PATENT, TRADEMARK & COPYRIGHT ATTORNEYS

P.O. Box 2938

Minneapolis, MN 55402

Telephone (612) 373-6900 Facsimile (612) 339-3061

November 30, 2007

Time: 10:25 a.m.
(Minneapolis, Minn.)TO: Commissioner for Patents
Attn: Assignment Recordation Services
Patent Examining Corps
Facsimile Center
P.O. Box 1450
Alexandria, VA 22313-1450

FROM: Viet V. Tong

OUR REF: 884.G97US1

FAX NUMBER 571-273-0140

Documents Transmitted:

Assignment (8 pages), Assignment Recordation Form Cover Sheet (1 page), authorization to charge Deposit Account No. 19-0743 in the amount of \$40.00 to cover the Assignment Recording Fee.Total pages of this transmission, including cover letter: (10 pgs)

If you do NOT receive all of the pages described above, please telephone us at 612-373-6900 or fax us at 612-339-3061.

In re. Patent Application of: Sridhar Tirumalai et al.

Examiner: Patrick O'Neill

Serial No.: 11/396,041


Group Art Unit: 2817

Filed: March 31, 2006

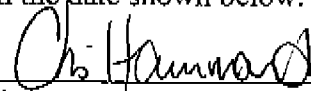
Docket No.: 884.G97US1

Title: FAST LOCK SCHEME FOR PHASE LOCKED LOOPS AND DELAY LOCKED LOOPS

Please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

By: 
Name: Viet V. Tong
Reg. No. 45,416

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below.


Chris L. HammondNovember 30, 2007
Date