

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

01/22/2007  
 500210848

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT						
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the the spelling of Assignee's name to Qimonda North American Corporation previously recorded on Reel 018717 Frame 0509. Assignor(s) hereby confirms the Assignee is Qimonda North American Corporation.						
<b>CONVEYING PARTY DATA</b>							
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Thomas D. Happ</td> <td>12/05/2006</td> </tr> <tr> <td>Thomas Nirschl</td> <td>12/05/2006</td> </tr> </tbody> </table>		Name	Execution Date	Thomas D. Happ	12/05/2006	Thomas Nirschl	12/05/2006
Name	Execution Date						
Thomas D. Happ	12/05/2006						
Thomas Nirschl	12/05/2006						
<b>RECEIVING PARTY DATA</b>							
<b>Name:</b>	Qimonda North American Corporation						
<b>Street Address:</b>	3000 CenterGreen Way						
<b>City:</b>	Cary						
<b>State/Country:</b>	NORTH CAROLINA						
<b>Postal Code:</b>	27513						
<b>PROPERTY NUMBERS Total: 1</b>							
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>11620432</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	11620432		
Property Type	Number						
Application Number:	11620432						
<b>CORRESPONDENCE DATA</b>							
<b>Fax Number:</b>	(650)712-0263						
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>							
<b>Phone:</b>	650-712-0340						
<b>Email:</b>	phurley@hmbay.com						
<b>Correspondent Name:</b>	Mark A. Haynes						
<b>Address Line 1:</b>	Haynes Beffel & Wolfeld LLP						
<b>Address Line 2:</b>	PO Box 366						
<b>Address Line 4:</b>	Half Moon Bay, CALIFORNIA 94019						
<b>ATTORNEY DOCKET NUMBER:</b>	MXIC 1696-1						
<b>NAME OF SUBMITTER:</b>	Mark A. Haynes						

CH \$40.00 11620432

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PATENT  
 REEL: 018992 FRAME: 0558

**Total Attachments: 5**

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PATENT ASSIGNMENT

Electronic Version v1.1  
Stylesheet Version v1.1

01/05/2007  
500203336

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>Thomas D. Happ</td><td>12/05/2006</td></tr><tr><td>Thomas Nirschi</td><td>12/06/2006</td></tr></tbody></table>		Name	Execution Date	Thomas D. Happ	12/05/2006	Thomas Nirschi	12/06/2006
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Thomas Nirschi	12/06/2006						
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Name:	Qimonda North American Corporation						
Street Address:	3000 CenterGreen Way						
City:	Cary						
State/Country:	NORTH CAROLINA						
Postal Code:	27513						
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Application Number:	11620432						
CORRESPONDENCE DATA							
Fax Number:	(650)712-0268						
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>							
Phone:	650-712-0340						
Email:	phurley@hmbay.com						
Correspondent Name:	Mark A. Haynes						
Address Line 1:	Haynes Bettle & Wolfeld LLP						
Address Line 2:	PO Box 366						
Address Line 4:	Half Moon Bay, CALIFORNIA 94019						
ATTORNEY DOCKET NUMBER:	MXIC 1696-1						
NAME OF SUBMITTER:	Mark A. Haynes						
Total Attachments: 3 source=Qimonda Assignment MXIC 1696-1 2007-01-05#page1.tif source=Qimonda Assignment MXIC 1696-1 2007-01-05#page2.tif							

CH \$40.00 11620432

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Atty. Docket No.: 6021C 1696-1  
(PCM0088) (P940207US)

**JOINT TO CORPORATE  
ASSIGNMENT**

WHEREAS, the undersigned,

(1) Thomas D. Happ  
31 Storm Street  
Tarrytown, NY 10591

(2) Thomas Nirschl  
17A Lamoille Street  
Essex Junction, VT 05452

hereinafter termed "Inventors", have invented certain new and useful improvements in

**Current Compliant Sensing Architecture for Multilevel Phase Change Memory**

and

have filed a non-provisional application for a United States patent disclosing and identifying the above invention on 1-5-07 as Application No. 11/620,432.

are filing a non-provisional application herewith, and

have executed an oath or declaration of inventorship for such non-provisional application on:

(1) the 5<sup>th</sup> day of December, 2006;

(2) the 6<sup>th</sup> day of December, 2006;

(hereinafter termed "application"); and

WHEREAS, Qimonda North American Corp., a corporation of Delaware, having a place of business at 3000 CenterGreen Way, Cary, North Carolina 27513 (hereinafter termed "Assignee"), is desirous of acquiring 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 by said Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries.

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

1. Said Inventors do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said applications and said invention; (b) in and to all rights to apply for foreign patents (including patent, utility model and industrial design) on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise, including the right to claim priority from the applications; (c) in and to any and all

Atty. Docket No.: MEXIC 1696-1  
(PCM0038) (P940207US)

applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to each and every reissue or extension of any of said patents.

2. Said Inventors hereby 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 foreign countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, execution 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 prosecuting any of said application; (c) for filing and prosecuting substitute, divisional, continuing or additional application covering said invention; (d) for filing and prosecuting application for reissuance of any said patents; (e) for interference or other priority proceedings involving said invention; and (f) for legal proceedings involving said invention and any application therefor and any patents granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use 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, the Inventors' respective heirs, legal representatives and assigns.

4. Said Inventors hereby warrant and represent that said Inventors have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

5. Said Inventors hereby authorize any of the following attorneys: Mark A. Haynes, Ernest J. Bcffel, Jr., Warren S. Wolfeld, James F. Hamm, Bill Kennedy, Kenta Suzue, Peter J. Su and Joseph E. Root to (a) insert the date of execution of the oath or declaration of inventorship, and (b) insert the application number and filing date of this application when known.

IN WITNESS WHEREOF, said Inventors have executed and delivered this instrument to said Assignee as of the date written below.

Thomas D. Happ  
Thomas D. Happ

Date: 12/5/06

\_\_\_\_\_  
Thomas Nirschl

Date: \_\_\_\_\_

Atty. Docket No.: MXIC 1696-1  
(PCM0088) (P940207US)

applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to each and every reissue or extension of any of said patents.

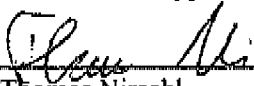
2. Said Inventors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, execution 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 prosecuting any of said application; (c) for filing and prosecuting substitute, divisional, continuing or additional application covering said invention; (d) for filing and prosecuting application for reissuance of any said patents; (e) for interference or other priority proceedings involving said invention; and (f) for legal proceedings involving said invention and any application therefor and any patents granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use 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.

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4. Said Inventors hereby warrant and represent that said Inventors have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

5. Said Inventors hereby authorize any of the following attorneys:  
Mark A. Haynes, Ernest J. Beffel, Jr., Warren S. Wolfeld, James P. Hann, Bill Kennedy, Kenia Suzue, Peter J. Su and Joseph E. Root  
to (a) insert the date of execution of the oath or declaration of inventorship, and (b) insert the application number and filing date of this application when known.

IN WITNESS WHEREOF, said Inventors have executed and delivered this instrument to said Assignee as of the date written below.

\_\_\_\_\_  
Thomas D. Happ  
  
\_\_\_\_\_  
Thomas Nirschl

Date: \_\_\_\_\_

Date: 12-06-06

**HAYNES BEHFEL & WOLFELD LLP**  
 INTELLECTUAL PROPERTY LAW  
 P.O. Box 366, 751 Kelly Street  
 Half Moon Bay, CA 94019  
 Phone 650-712-0340 Fax 650 712 0263  
[www.fmbay.com](http://www.fmbay.com)

MARK HAYNES  
 ERNIE BEHFEL  
 WARREN WOLFELD  
 JIM HANN

*Of Counsel*  
 \*BILL KENNEDY  
 KENTA SUZUKI  
 PETER SU  
 \*\*JOB ROOT  
 \*admitted in MA only  
 \*\*admitted in NY only

## FACSIMILE TRANSMITTAL FORM

FAX NUMBER:	571-273-0140
TRANSMITTED TO:	Assignment Branch
OF:	USPTO
FROM:	Paula Faulk Hurley, Patent Paralegal for Mark Haynes
CLIENT/MATTER:	MXIC 1696-1 US 11/620,432
DATE:	8 March 2007

TOTAL NUMBER OF PAGES INCLUDING THIS COVER SHEET:	10
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ORIGINAL:	
<input checked="" type="checkbox"/>	WILL NOT FOLLOW
<input type="checkbox"/>	FOLLOWS VIA AIRMAIL
<input type="checkbox"/>	FOLLOWS VIA COURIER

**Attached are the following documents:**

Letter of Non-Recordation from Examiner Allyson Purnell (2 pp);  
 Assignment document (3 pp.);  
 Cover Sheet 500210848 dated 01/22/2007 (2 pp); and  
 Cover Sheet 500203336 dated 01/05/2007 (2 pp.).

Please charge any fees to Deposit Account 50-0869 . \$40 was paid twice-for the original Assignment and the corrective Assignment so no fees should be due.

Thank you,  
 Paula Faulk Hurley, Patent Paralegal for Mark Haynes  
 Reg. No. 30,846

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**PATENT**  
**REEL: 018992 FRAME: 0565**



**UNITED STATES PATENT AND TRADEMARK OFFICE**UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

JANUARY 23, 2007

PTAS

**\*500210848A\***MARK A. HAYNES  
HAYNES BEFFEL & WOLFELD LLP  
PO BOX 366  
HALF MOON BAY, CA 94019**\*500210848A\***UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF NON-RECORDATION OF DOCUMENT

DOCUMENT ID NO.: 500210848

THE ENCLOSED DOCUMENT HAS BEEN EXAMINED AND FOUND NON-RECORDABLE BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. THE REASON(S) FOR NON-RECORDATION ARE STATED BELOW. DOCUMENTS BEING RESUBMITTED FOR RECORDATION MUST BE ACCOMPANIED BY A NEW COVER SHEET REFLECTING THE CORRECT INFORMATION TO BE RECORDED AND THE DOCUMENT ID NUMBER REFERENCED ABOVE.

THE ORIGINAL DATE OF FILING OF THIS ASSIGNMENT DOCUMENT WILL BE MAINTAINED IF RESUBMITTED WITH THE APPROPRIATE CORRECTION(S) WITHIN 30 DAYS FROM THE DATE OF THIS NOTICE AS OUTLINED UNDER 37 CFR 3.51. THE RESUBMITTED DOCUMENT MUST INCLUDE A STAMP WITH THE OFFICIAL DATE OF RECEIPT UNDER 37 CFR 3. APPLICANTS MAY USE THE CERTIFIED PROCEDURES UNDER 37 CFR 1.8 OR 1.10 FOR RESUBMISSION OF THE RETURNED PAPERS, IF THEY DESIRE TO HAVE THE BENEFIT OF THE DATE OF DEPOSIT IN THE UNITED STATES POSTAL SERVICE.

SEND DOCUMENTS TO: U.S. PATENT AND TRADEMARK OFFICE,  
MAIL STOP: ASSIGNMENT SERVICES BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.  
IF YOU HAVE ANY QUESTIONS REGARDING THIS NOTICE,  
YOU MAY CONTACT THE INDIVIDUAL WHOSE NAME APPEARS ON THIS NOTICE AT  
571-272-3350.

1. THE DOCUMENT SUBMITTED TO CORRECT ERRORS IN THE PREVIOUSLY RECORDED DOCUMENT IS NOT ACCEPTABLE. TO CORRECT AN ERROR IN THE RECORDED DOCUMENT, A CORRECTIVE COVER SHEET ALONG WITH THE ORIGINAL COVER SHEET, MUST BE ACCOMPANIED BY THE CORRECT ASSIGNMENT DOCUMENT OR A

Mar. 8. 2007 9:33AM

No. 1230 P. 3

CORRECTIONS AS SET FORTH IN 37 CFR 3.134.

ALLYSON PURNELL, EXAMINER  
ASSIGNMENT SERVICES BRANCH  
PUBLIC RECORDS DIVISION