• U.S. PTO	
12/231369	
09/02/2008	
	Docket No.: AF03019
FORM PTO-1595 (Modified) 09-12	
(Rev. 08-05)	
OMB No. 0651-0027 (exp.6/30/2008) P08/REV05	
10350	
To the Director of the United States Pate. 10302	4470 and attached documents or the new address(es)
1. Name of conveying party(ies): Eunha Kim	2. Name and address of receiving party(ies):
Minh-Van Ngo	Name: Spansion LLC
	Internal Address:
Additional names(s) of conveying party(ies) attached?	
3. Nature of conveyance/ExecutionDate(s):	
Execution Date(s): <u>8/28/08, 8/28/08</u>	Street Address: 915 DeGuigne Drive
⊠ Assignment	
Security Agreement Change of Name	City: Sunnyvale
□ Joint Research Agreement	
Government Interest Assignment	State: CA
Executive Order 9424, Confirmatory License	Country: USA ZIP: 940
	Additional name(s) & address(es) attached?  Yes
4. Application or patent numbers(s):	I This document is being filed together with a new ap
4. Application or patent numbers(s):	I This document is being filed together with a new ap
4. Application or patent numbers(s):	I This document is being filed together with a new ap
4. Application or patent numbers(s):	I This document is being filed together with a new ap
4. Application or patent numbers(s):	I This document is being filed together with a new ap
4. Application or patent numbers(s):	This document is being filed together with a new ap B. Patent No.(s)
4. Application or patent numbers(s): A. Patent Application No.(s) Additional numbers at 5. Name and address to whom correspondence	<ul> <li>This document is being filed together with a new ap B. Patent No. (s)</li> <li>tached?  Yes No</li> <li>Total number of applications and patents</li> </ul>
4. Application or patent numbers(s): A. Patent Application No.(s) Additional numbers at 5. Name and address to whom correspondence concerning document should be mailed:	<ul> <li>This document is being filed together with a new ap B. Patent No. (s)</li> <li>tached?  Yes No</li> <li>Total number of applications and patents involved: 1</li> </ul>
4. Application or patent numbers(s): A. Patent Application No.(s) Additional numbers at 5. Name and address to whom correspondence concerning document should be mailed: Name: Paul J. Winters	<ul> <li>This document is being filed together with a new ap B. Patent No. (s)</li> <li>tached?  Yes No</li> <li>Total number of applications and patents</li> </ul>
4. Application or patent numbers(s): A. Patent Application No.(s) Additional numbers at 5. Name and address to whom correspondence concerning document should be mailed:	<ul> <li>This document is being filed together with a new ap B. Patent No. (s)</li> <li>tached?  Yes No</li> <li>Total number of applications and patents involved: 1</li> </ul>
4. Application or patent numbers(s): A. Patent Application No.(s) Additional numbers at 5. Name and address to whom correspondence concerning document should be mailed: Name: Paul J. Winters Internal Address:	<ul> <li>This document is being filed together with a new ap B. Patent No.(s)</li> <li>B. Patent No.(s)</li> <li>6. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 1.21(h) &amp; 3.41): \$40.00</li> <li>Authorized to be charged by credit card</li> </ul>
<ul> <li>4. Application or patent numbers(s):         <ul> <li>A. Patent Application No.(s)</li> <li>Additional numbers at</li> </ul> </li> <li>5. Name and address to whom correspondence concerning document should be mailed:         <ul> <li>Name: Paul J. Winters</li> </ul> </li> </ul>	<ul> <li>This document is being filed together with a new ap B. Patent No. (s)</li> <li>B. Patent No. (s)</li> <li>6. Total number of applications and patents involved:</li></ul>
4. Application or patent numbers(s): A. Patent Application No.(s) Additional numbers at 5. Name and address to whom correspondence concerning document should be mailed: Name: Paul J. Winters Internal Address:	<ul> <li>This document is being filed together with a new ap B. Patent No. (s)</li> <li>B. Patent No. (s)</li> <li>6. Total number of applications and patents involved:</li></ul>
4. Application or patent numbers(s): A. Patent Application No.(s) Additional numbers at 5. Name and address to whom correspondence concerning document should be mailed: Name: Paul J. Winters Internal Address:	<ul> <li>This document is being filed together with a new ap B. Patent No. (s)</li> <li>B. Patent No. (s)</li> <li>6. Total number of applications and patents involved:</li></ul>
A. Patent Application No.(s)      A. Patent Application No.(s)      Additional numbers at     Additional numbers at     S. Name and address to whom correspondence     concerning document should be mailed:     Name: Paul J. Winters     Internal Address:     Street Address: 307 Cypress Point Drive	<ul> <li>This document is being filed together with a new ap B. Patent No. (s)</li> <li>B. Patent No. (s)</li> <li>6. Total number of applications and patents involved:</li></ul>
4. Application or patent numbers(s): A. Patent Application No.(s) Additional numbers at 5. Name and address to whom correspondence concerning document should be mailed: Name: Paul J. Winters Internal Address: Street Address: <u>307 Cypress Point Drive</u> City: Mountain View	<ul> <li>This document is being filed together with a new ap B. Patent No. (s)</li> <li>B. Patent No. (s)</li> <li>6. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 1.21(h) &amp; 3.41): \$40.00</li> <li>Authorized to be charged by credit card</li> <li>Authorized to be charged to deposit account</li> <li>Enclosed</li> <li>None required (government interest not affecting</li> <li>8. Payment Information:</li> <li>a. Credit Card Last 4 Numbers</li> </ul>
4. Application or patent numbers(s):         A. Patent Application No.(s)         Additional numbers at         5. Name and address to whom correspondence         concerning document should be mailed:         Name: Paul J. Winters         Internal Address:         Street Address:         307 Cypress Point Drive         City: Mountain View         State:       CA         ZIP:       94043         Phone Number:       650-961-5658	<ul> <li>This document is being filed together with a new ap B. Patent No. (s)</li> <li>B. Patent No. (s)</li> <li>6. Total number of applications and patents involved:</li></ul>
4. Application or patent numbers(s):         A. Patent Application No.(s)         Additional numbers at         5. Name and address to whom correspondence         concerning document should be mailed:         Name: Paul J. Winters         Internal Address:         Street Address: 307 Cypress Point Drive         City: Mountain View         State: CA       ZIP: 94043         Phone Number: 650-961-5658         Fax Number: 650-961-5658	<ul> <li>This document is being filed together with a new ap B. Patent No.(s)</li> <li>B. Patent No.(s)</li> <li>6. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 1.21(h) &amp; 3.41): \$40.00</li> <li>Authorized to be charged by credit card</li> <li>Authorized to be charged by credit card</li> <li>Authorized to be charged to deposit account</li> <li>Enclosed</li> <li>None required (government interest not affecting</li> <li>8. Payment Information:</li> <li>a. Credit Card Last 4 Numbers</li> <li>99/11/2007 De00017 503037 12231369</li> <li>b. Deposit Accepted Number 40 60807</li> </ul>
4. Application or patent numbers(s):         A. Patent Application No.(s)         Additional numbers at         5. Name and address to whom correspondence         concerning document should be mailed:         Name: Paul J. Winters         Internal Address:         Street Address:         Otiv:         Mountain View         State:       CA         ZIP:       94043         Phone Number:       650-961-5658         Fax Number:       650-961-5658         Email Address:       piw99@earthlink.net	<ul> <li>This document is being filed together with a new ap B. Patent No. (s)</li> <li>B. Patent No. (s)</li> <li>6. Total number of applications and patents involved:</li></ul>
4. Application or patent numbers(s):         A. Patent Application No.(s)         Additional numbers at         5. Name and address to whom correspondence         concerning document should be mailed:         Name: Paul J. Winters         Internal Address:         Street Address:         307 Cypress Point Drive         City:         Mountain View         State:       CA         ZIP:       94043         Phone Number:       650-961-5658         Fax Number:       650-961-5658         Email Address:       pjw99@earthlink.net         9. Signature:       D	<ul> <li>This document is being filed together with a new ap B. Patent No.(s)</li> <li>B. Patent No.(s)</li> <li>6. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 1.21(h) &amp; 3.41): \$40.00</li> <li>Authorized to be charged by credit card</li> <li>Authorized to be charged by credit card</li> <li>Authorized to be charged to deposit account</li> <li>Enclosed</li> <li>None required (government interest not affecting</li> <li>8. Payment Information:</li> <li>a. Credit Card Last 4 Numbers</li> <li>99/11/2005 piretile proceeding 12231369</li> <li>b. Deposit Accepting Number 4048877</li> <li>Authorized User Name Paul J. Winters</li> </ul>
4. Application or patent numbers(s):         A. Patent Application No.(s)         Additional numbers at         5. Name and address to whom correspondence         concerning document should be mailed:         Name: Paul J. Winters         Internal Address:         Street Address:         Otiv:         Mountain View         State:       CA         ZIP:       94043         Phone Number:       650-961-5658         Fax Number:       650-961-5658         Email Address:       pjw99@earthlink.net         9. Signature:       Mammutain View	<ul> <li>☑ This document is being filed together with a new ap B. Patent No.(s)</li> <li>B. Patent No.(s)</li> <li>G. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 1.21(h) &amp; 3.41): \$40.00</li> <li>☐ Authorized to be charged by credit card</li> <li>☑ Authorized to be charged by credit card</li> <li>☑ Authorized to be charged by credit card</li> <li>☑ Authorized to be charged to deposit account</li> <li>☐ Enclosed</li> <li>☐ None required (government interest not affecting</li> <li>8. Payment Information: a. Credit Card Last 4 Numbers 09/11/2005 pictules Deb00017 503037 12231369</li> <li>b. Deposit Accepted Number 40008017 503037 12231369</li> <li>b. Deposit Accepted Number 40008017 503037 12231369</li> </ul>
4. Application or patent numbers(s):         A. Patent Application No.(s)         Additional numbers at         5. Name and address to whom correspondence         concerning document should be mailed:         Name: Paul J. Winters         Internal Address:         Street Address:         Otive         City: Mountain View         State:       CA         ZIP:       94043         Phone Number:       650-961-5658         Fax Number:       650-961-5658         Email Address:       pjw99@earthlink.net         9. Signature:       Mathematical Signature	<ul> <li>This document is being filed together with a new ap B. Patent No.(s)</li> <li>B. Patent No.(s)</li> <li>6. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 1.21(h) &amp; 3.41): \$40.00</li> <li>Authorized to be charged by credit card</li> <li>Authorized to be charged by credit card</li> <li>Authorized to be charged to deposit account</li> <li>Enclosed</li> <li>None required (government interest not affecting</li> <li>8. Payment Information:</li> <li>a. Credit Card Last 4 Numbers</li> <li>99/11/2058 piretile</li> <li>Deposit Accepted Number 4068897</li> <li>Authorized User Name Paul J. Winters</li> </ul>
4. Application or patent numbers(s):         A. Patent Application No.(s)         Additional numbers at         5. Name and address to whom correspondence         concerning document should be mailed:         Name: Paul J. Winters         Internal Address:         Street Address:         Otiv:         Mountain View         State:       CA         ZIP:       94043         Phone Number:       650-961-5658         Fax Number:       650-961-5658         Email Address:       pjw99@earthlink.net         9. Signature:       Mammutain View	<ul> <li>☑ This document is being filed together with a new ap B. Patent No.(s)</li> <li>B. Patent No.(s)</li> <li>G. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 1.21(h) &amp; 3.41): \$40.00</li> <li>☐ Authorized to be charged by credit card</li> <li>☑ Authorized to be charged by credit card</li> <li>☑ Authorized to be charged by credit card</li> <li>☑ Authorized to be charged to deposit account</li> <li>☐ Enclosed</li> <li>☐ None required (government interest not affecting</li> <li>8. Payment Information: a. Credit Card Last 4 Numbers 09/11/2005 pictules Deb00017 503037 12231369</li> <li>b. Deposit Accepted Number 40008017 503037 12231369</li> <li>b. Deposit Accepted Number 40008017 503037 12231369</li> </ul>

PATENT REEL: 021522 FRAME: 0205

## **ASSIGNMENT**

For good and valuable consideration, receipt of which is hereby acknowledged, we

Eunha Kim of 2409 Sharon Road, Menlo Park, CA 94025; Minh-Van Ngo of 40986 Canyon Heights Dr., Fremont, CA 94539

hereby sell, assign and transfer to SPANSION LLC, a Delaware limited liability company, with a business address at 915 DeGuigne Drive, P.O. Box 3453, Sunnyvale, CA 94088-3453 U.S.A., its successors and assigns, the entire right, title and interest throughout the world in our invention in

## METHOD FOR ACHIEVING VERY SMALL FEATURE SIZE IN SEMICONDUCTOR DEVICE BY UNDERTAKING SILICIDE SIDEWALL GROWTH AND ETCHING

for which we have executed a United States patent application on or about the date of this assignment, and all patent applications and patents of every country for said invention, including divisions, reissues, continuations and extensions thereof, and all rights of priority resulting from the filing of said applications; we authorize the above-named assignee to apply for patents of foreign countries for said invention, and to claim all rights of priority without further authorization from us; we agree to execute all papers useful in connection with said United States and foreign applications, and generally to do everything possible to aid said assignee, their successors, assigns and nominees, at their request and expense, in obtaining and enforcing patents for said invention in all countries; and we request the Commissioner of Patents and Trademarks to issue all patents granted for said invention to the above-named assignee, its successors and assigns.

Executed this \_28th day of \_ August , 2008.

K E

28 day of X Aregust Executed this M

1

Minh-Van Ngo

PATENT REEL: 021522 FRAME: 0206

Docket No.: AF03019 FORM PTO-1595 (Modified) **RECORDATION FORM COVER SHEET U.S. DEPARTMENT OF COMME** (Rev. 08-05) OMB No. 0651-0027 (exp.6/30/2008) Patent and Trademark ( PATENTS ONLY P08/REV05 To the Director of the United States Patent and Trademark Office: Please record the attached documents or the new address(es) belo 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Eunha Kim Name: Spansion LLC Minh-Van Ngo Internal Address: Additional names(s) of conveying party(ies) attached? 🛛 🖸 Yes 🖾 No 3. Nature of conveyance/ExecutionDate(s): Street Address: 915 DeGuigne Drive Execution Date(s): 8/28/08, 8/28/08 ☑ Assignment Merger City: Sunnyvale Security Agreement Change of Name Joint Research Agreement State: CA Government Interest Assignment Country: USA ZIP: 94088 Executive Order 9424, Confirmatory License Additional name(s) & address(es) attached? 📋 Yes 🖄 No Other 4. Application or patent numbers(s): This document is being filed together with a new applica A. Patent Application No.(s) B. Patent No.(s) والمترجب وأنتقد Additional numbers attached? 🛛 No 5. Name and address to whom correspondence 6. Total number of applications and patents concerning document should be mailed: involved: 1 Name: Paul J. Winters 7. Total fee (37 CFR 1.21(h) & 3.41): \$40.00 . Internal Address: Authorized to be charged by credit card Authorized to be charged to deposit account Street Address: 307 Cypress Point Drive Enclosed None required (government interest not affecting title) City: Mountain View 8. Payment Information: ZIP: 94043 **...** State: CA a. Credit Card Last 4 Numbers Phone Number: 650-961-5658 Expiration Date Fax Number: 650-961-5658 b. Deposit Account Number 50-3837 Email Address: pjw99@earthlink.net Paul J. Winters Authorized User Name 9. Signature: September 2, 2008 ionature Date Paul J. Winters - Total number of pages including cover Name of Person Signing sheet, attachments, and document: Documents to be recorded (including cover sheet) should be faxed to (571)273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

**RECORDED: 09/02/2008** 

٩.