

## PATENT ASSIGNMENT

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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>JONG-WON LEE</td><td>02/03/2005</td></tr><tr><td>KUO-WEI CHANG</td><td>10/24/2004</td></tr></tbody></table>		Name	Execution Date	JONG-WON LEE	02/03/2005	KUO-WEI CHANG	10/24/2004				
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JONG-WON LEE	02/03/2005										
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RECEIVING PARTY DATA											
<table border="1"><tr><td>Name:</td><td>INTEL CORPORATION</td></tr><tr><td>Street Address:</td><td>2200 MISSION COLLEGE BOULEVARD</td></tr><tr><td>City:</td><td>SANTA CLARA</td></tr><tr><td>State/Country:</td><td>CALIFORNIA</td></tr><tr><td>Postal Code:</td><td>95052</td></tr></table>		Name:	INTEL CORPORATION	Street Address:	2200 MISSION COLLEGE BOULEVARD	City:	SANTA CLARA	State/Country:	CALIFORNIA	Postal Code:	95052
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PROPERTY NUMBERS Total: 1											
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Application Number:	10977186										
CORRESPONDENCE DATA											
Fax Number: (713)468-8883 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
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NAME OF SUBMITTER:	Timothy N. Trop										
Total Attachments: 4 source=ITO.0073US assignment#page1.tif source=ITO.0073US assignment#page2.tif source=ITO.0073US assignment#page3.tif source=ITO.0073US assignment#page4.tif											

CH 10977186 \$40.00

PATENT

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REEL: 015658 FRAME: 0245

## ASSIGNMENT

WHEREAS, We, JONG-WON LEE, KUO-WEI CHANG, and MICHAEL L. MCSWINEY, are joint inventors of DEPOSITING TITANIUM SILICON NITRIDE FILMS FOR FORMING PHASE CHANGE MEMORIES, application for United States Letters Patent Serial No. 10/977,186, filed 10/28/04; and

WHEREAS, INTEL CORPORATION, a corporation created and existing under and by virtue of the laws of the State of Delaware, is desirous of acquiring the entire right, title and interest in and to the aforesaid invention throughout the world, and all right, title and interest in, to and under any and all Letters Patent of the United States and all other countries throughout the world;

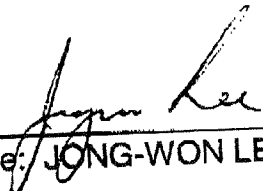
NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby sell, assign, transfer and set over to INTEL CORPORATION, all right, title and interest in and to the said invention throughout the world, and said application for U.S. Letters Patent, and any and all divisions, continuations, and reissues thereof, and any and all Letters Patent of the United States and foreign countries which may be granted therefor, the same to be held and enjoyed by INTEL CORPORATION for its own use and benefit, and for the use and benefit of its successors, assigns, or other legal representatives, to the end of the term or terms for which said Letters Patent of the United States or foreign countries are or may be granted or reissued, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

And we hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States on said invention or resulting from said application and from any and all divisions, continuations, and reissues thereof, to INTEL CORPORATION, as assignee of our entire interest, and hereby covenant that we have the full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith.

And we further hereby covenant and agree that we will, at any time, upon request, execute and deliver any and all papers that may be necessary or desirable to perfect the title of said invention and to such Letters Patent as may be granted therefor, to INTEL CORPORATION, its successors, assigns, or other legal representatives and that if INTEL CORPORATION, its successors, assigns or other legal representatives shall desire to file any divisional or continuation applications or to secure a reissue of such Letters Patent, or to file a disclaimer relating thereto, will upon request, sign all papers, make all rightful oaths and do all lawful acts requisite for the filing of such divisional or continuation application, or such application for reissue and the procuring thereof, and for the filing of such disclaimer, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

And we do further covenant and agree that we will, at any time upon request, communicate to INTEL CORPORATION, its successors, assigns or other legal representatives, such facts relating to said invention and Letters Patent or the file history thereof as may be known to us, and testify as to the same in any interference or other litigation when requested so to do, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

EXECUTED THIS 3<sup>rd</sup> day of FEBRUARY, 2004.

  
Name: JONG-WON LEE

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EXECUTED THIS \_\_\_\_\_ day of \_\_\_\_\_, 2004.

\_\_\_\_\_  
Name: KUO-WEI CHANG

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EXECUTED THIS \_\_\_\_\_ day of \_\_\_\_\_, 2004.

\_\_\_\_\_  
Name: MICHAEL L. MCSWINEY

ITO.0073US (P19860)

## ASSIGNMENT

WHEREAS, We, JONG-WON LEE, KUO-WEI CHANG, and MICHAEL L. MCSWINEY, are joint inventors of DEPOSITING TITANIUM SILICON NITRIDE FILMS FOR FORMING PHASE CHANGE MEMORIES, application for United States Letters Patent which is executed of even date herewith; and

WHEREAS, INTEL CORPORATION, a corporation created and existing under and by virtue of the laws of the State of Delaware, is desirous of acquiring the entire right, title and interest in and to the aforesaid invention throughout the world, and all right, title and interest in, to and under any and all Letters Patent of the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby sell, assign, transfer and set over to INTEL CORPORATION, all right, title and interest in and to the said invention throughout the world, and said application for U.S. Letters Patent, and any and all divisions, continuations, and reissues thereof, and any and all Letters Patent of the United States and foreign countries which may be granted therefor, the same to be held and enjoyed by INTEL CORPORATION for its own use and benefit, and for the use and benefit of its successors, assigns, or other legal representatives, to the end of the term or terms for which said Letters Patent of the United States or foreign countries are or may be granted or reissued, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

And we hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States on said invention or resulting from said application and from any and all divisions, continuations, and reissues thereof, to INTEL CORPORATION, as assignee of our entire interest, and hereby covenant that we have the full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith.

And we further hereby covenant and agree that we will, at any time, upon request, execute and deliver any and all papers that may be necessary or desirable to perfect the title of said invention and to such Letters Patent as may be granted therefor, to INTEL CORPORATION, its successors, assigns, or other legal representatives and that if INTEL CORPORATION, its successors, assigns or other legal representatives shall desire to file any divisional or continuation applications or to secure a reissue of such Letters Patent, or to file a disclaimer relating thereto, will upon request, sign all papers, make all rightful oaths and do all lawful acts requisite for the filing of such divisional or continuation application, or such application for reissue and the procuring thereof, and for the filing of such disclaimer, without further compensation but at the expense of said assignee, its successors, or other legal representatives.


And we do further covenant and agree that we will, at any time upon request, communicate to INTEL CORPORATION, its successors, assigns or other legal representatives, such facts relating to said invention and Letters Patent or the file history thereof as may be known to us, and testify as to the same in any interference or other litigation when requested so to do, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

EXECUTED THIS \_\_\_\_\_ day of \_\_\_\_\_, 2004.

\_\_\_\_\_  
Name: JONG-WON LEE

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EXECUTED THIS 24<sup>th</sup> day of October, 2004.

  
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Name: KUO-WEI CHANG

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EXECUTED THIS \_\_\_\_\_ day of \_\_\_\_\_, 2004.

\_\_\_\_\_  
Name: MICHAEL L. MCSWINEY

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