

<div>Form PTO-1595 (Rev. 10/02) OMB No. 0651-0027 (exp. 6/30/2005)</div>		<div>RECORDATION FORM COVER SHEET PATENTS ONLY</div>		<div>U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office</div>	
<div>Docket No. H0697</div>					
<div>To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.</div>					
<div>1. Name of conveying party(ies): Jean Y. Yang Mark T. Ramsbey Jaeyong Park Tazrien Kamal Emmanuel H. Lingunis</div>			<div>2. Name and address of receiving party(ies) Name: <u>Advanced Micro Devices, Inc.</u> Internal Address: _____ _____ _____ Street Address: <u>One AMD Place</u> P.O. Box <u>3453</u> City: <u>Sunnyvale</u> State: <u>CA</u> Zip: <u>94088-3453</u></div>		
<div>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</div>			<div>Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</div>		
<div>3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____</div>			<div>Execution Date: <u>11/14/03, 11/26/03, 12/19/03</u></div>		
<div>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) <u>10/770,245</u> B. Patent No.(s) _____ _____ Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</div>					
<div>5. Name and address of party to whom correspondence concerning document should be mailed: Name: <u>Andrew Romero</u> Internal Address: _____ <u>Renner, Otto, Boisselle & Sklar, LLP</u> _____ Street Address: <u>1621 Euclid Avenue</u> <u>Nineteenth Floor</u> City: <u>Cleveland</u> State: <u>OH</u> Zip: <u>44115</u></div>			<div>6. Total number of applications and patents involved: <u>1</u> 7. Total fee (37 CFR 3.41).....\$ <u>\$40.00</u> <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account 8. Deposit account number: <u>18-0988</u></div>		
<div>DO NOT USE THIS SPACE</div>					
<div>9. Signature. <div>Andrew Romero, Reg. No 43,890 <u>Andrew Romero</u> 02/20/04 Name of Person Signing Signature Date</div><div>Total number of pages including cover sheet, attachments, and documents: <u>8</u></div></div>					

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

CH \$40.00 180988 10770245

AMD Docket No. H0697

ASSIGNMENT

For good and valuable consideration received of the hereinafter named assignee, receipt of which is hereby acknowledged, the undersigned

Jean Y. Yang
125 Connemara Way, #17
Sunnyvale, California 94087 USA
Citizenship: USA

Mark T. Ramsbey
402 Cumulus Avenue
Sunnyvale, California 94087 USA
Citizenship: USA

Jaeyong Park
1069 Greco Avenue, #B-213
Sunnyvale, California 94087 USA
Citizenship: USA

Tazrien Kamal
390 Elan Village Lane, #304
San Jose, California 95134 USA
Citizenship: Bangladesh

Emmanuel H. Lingunis
330 Elan Village Lane, #406
San Jose, California 95134 USA
Citizenship: USA

hereby sell and assign to ADVANCED MICRO DEVICES, INC., a corporation of Delaware having a place of business at One AMD Place, P.O. Box 3453, Sunnyvale, California 94088-3453, U.S.A., its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the inventions entitled

BITLINE HARD MASK SPACER FLOW FOR MEMORY CELL SCALING

for which application for United States Letters Patent has been filed on 02/02/04 under Serial No. 10/770,673, or was executed by the undersigned on the date below and is being filed concurrently herewith, said application for United States Letters Patent, and all United States provisional patent applications on which priority is claimed, including but not limited to, application Serial No. _____, filed on _____, any and all other applications for Letters Patent on said inventions in countries foreign to the United States, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said applications and said Letters Patent; said assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said assignee or otherwise as said assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments being hereby authorized to issue or transfer all said Letters Patent to said assignee in

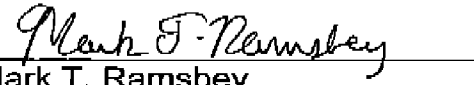
AMD Docket No. H0697

accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right heretofore given, and that the undersigned will do all acts reasonably serving to assure that said inventions, patent applications and Letters Patent shall be held and enjoyed by said assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said assignee, to furnish said assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

I authorize the patent attorney of record and/or having power of attorney in the U.S. patent application identified above to insert the serial number and filing date information for the patent application in the appropriate spaces in this assignment document when that information becomes available.

Signed:

Date:


Jean Y. Yang11-14-03 (9)
11-13-03
Mark T. Ramsbey11/26/03
Jaeyong Park11/26/03
Tazrieh Kamal11/26/03
Emmanuil H. Lingunis12/19/03

AMD Docket No. H0697

CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Santa Clara

On Nov. 14, 2003 before me,

M. Pacheco, Notary Public
Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Jean Y. Yang
Name(s) of Signer(s)

☐ personally known to me - OR - ☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary Public



M. Pacheco

CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Santa Clara

On Nov. 26, 2003 before me,

M. Pacheco, Notary Public
Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Mark T. Ramsbey
Name(s) of Signer(s)

☒ personally known to me - OR - ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary Public



M. Pacheco

AMD Docket No. H0697

CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Santa Clara

On Nov. 26, 2003 before me,

M. Pacheco, Notary Public
Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Jaeyong Park
Name(s) of Signer(s)

☐ personally known to me - OR - ☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

M. Pacheco
Signature of Notary Public

Signature of Notary Public

CERTIFICATE OF ACKNOWLEDGMENT

State of California

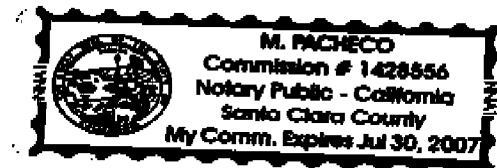
County of Santa Clara

On Nov. 26, 2003 before me,

M. Pacheco, Notary Public
Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Tazrien Kamal
Name(s) of Signer(s)

☐ personally known to me - OR - ☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

M. Pacheco
Signature of Notary Public

Signature of Notary Public

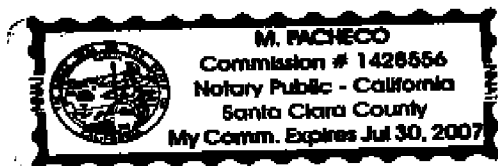
AMD Docket No. H0697**CERTIFICATE OF ACKNOWLEDGMENT**State of CaliforniaCounty of Santa ClaraOn Dec. 19, 2003 before me,M. Pacheco, Notary Public

Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared

Emmanuel Lingunis

Name(s) of Signer(s)



☒ personally known to me - OR - ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary Public

R:\ARomero\Cases\AMDS\PH0697US\Assignment.wpd