

04-09-2002

FORM PTO-1595

(Rev. 6-93)

OMB No. 0651-001 (exp. 4/94)



102047967

U.S. Department of Commerce

Patent and Trademark Office

Attorney Docket No. AF01133

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies):</p> <p>a. HALLIYAL, Arvind</p> <p>b. KAMAL, Tazrien</p> <p>c. NGO, Minh Van <i>03/27/02</i></p> <p>d. RAMSBEY, Mark T.</p> <p>e. SHIELDS, Jeffrey A.</p> <p>Additional name(s) of conveying party(ies) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies):</p> <p>ADVANCED MICRO DEVICES, INC. One AMD Place Sunnyvale, CA</p> <p>FUJITSU LIMITED 1-1 Kamikodanaka 4-chome Nakahara-ku, Kawasaki-shi Kanagawa-ken Japan</p> <p>Additional name(s) &amp; address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>			
<p>3. Nature of Conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Security Agreement <input type="checkbox"/> Other</p> <p>Execution Date(s): Feb. 25, 2002, Feb. 21, 2002, Feb. 13, 2002, Feb. 19, 2002, Feb. 20</p>				
<p>4. Application number(s) or patent number(s):</p> <p>If this document is being filed together with a new application, execution date of the application is: Feb. 25, 2002</p> <table style="width: 100%;"> <tr> <td style="width: 50%;"> <p>A. Patent Application No(s).</p> <p>Serial No.:      Date Filed:</p> </td> <td style="width: 50%;"> <p>B. Patent No(s).</p> </td> </tr> </table> <p style="text-align: center;">Additional numbers attached? <u>NO</u></p>		<p>A. Patent Application No(s).</p> <p>Serial No.:      Date Filed:</p>	<p>B. Patent No(s).</p>	
<p>A. Patent Application No(s).</p> <p>Serial No.:      Date Filed:</p>	<p>B. Patent No(s).</p>			
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p><b>Mikio Ishimaru</b> <b>The Law Offices of Mikio Ishimaru</b> <b>1110 Sunnyvale-Saratoga Rd.</b> <b>Suite A1</b> <b>Sunnyvale, CA 94087</b></p>	<p>6. Total number of applications and patents involved: <u>1</u></p> <p>7. Total Fee (37 CFR 3.41): . . . \$<u>40.00</u></p> <p><input type="checkbox"/> Enclosed</p> <p><input checked="" type="checkbox"/> Authorization to be charged to deposit account</p> <p>8. Deposit Account Number: <u>50-0374</u></p> <p style="font-size: small;">(Attach duplicate copy of this page if paying by deposit account)</p>			
DO NOT USE THIS SPACE				
<p>9. Statement and signature.</p> <p><i>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.</i></p> <table style="width: 100%; margin-top: 20px;"> <tr> <td style="width: 33%; text-align: center;"> <p><u>Mikio Ishimaru</u></p> <p>Name of Person Signing</p> </td> <td style="width: 33%; text-align: center;"> <p><i>Mikio Ishimaru</i></p> <p>Signature</p> </td> <td style="width: 33%; text-align: center;"> <p><u>March 27, 2002</u></p> <p>Date</p> </td> </tr> </table> <p style="text-align: right;">Total number of pages including cover sheet, attachments, and document: <u>9</u></p>		<p><u>Mikio Ishimaru</u></p> <p>Name of Person Signing</p>	<p><i>Mikio Ishimaru</i></p> <p>Signature</p>	<p><u>March 27, 2002</u></p> <p>Date</p>
<p><u>Mikio Ishimaru</u></p> <p>Name of Person Signing</p>	<p><i>Mikio Ishimaru</i></p> <p>Signature</p>	<p><u>March 27, 2002</u></p> <p>Date</p>		

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Mail document to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks

Box Assignment

Washington, D.C. 20231

04/09/2002 GTOW11 00000045 500374 10109235

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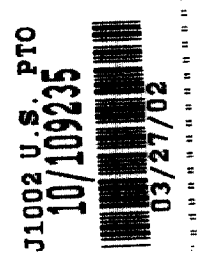
**PATENT**

**REEL: 012753 FRAME: 0854**

**Attachment to Form PTO - 1595  
Recordation Form Cover Sheet  
Attorney Docket No. AF01133**

**Additional Conveying Parties:**

- f. YANG, Jean Y.
- g. LINGUNIS, Emmanuil
- h. HUI, Angela T.
- i. OGURA, Jusuke



**Additional Execution Dates:**

- Feb. 21, 2002
- Feb. 26, 2002
- Feb. 21, 2002
- Mar. 19, 2002

**JOINT TO CORPORATE ASSIGNMENT**

WHEREAS, the undersigned Inventors:

(1) Arvind Halliyal,  
a resident of 20679 Shelly Drive, Cupertino, CA 95014; and

(2) Tazrien Kamal,  
a resident of 390 Elan Village Ln. #304, San Jose, CA 95134.

(3) Minh Van Ngo,  
a resident of 40986 Canyon Heights Drive, Fremont, CA 94539; and

(4) Mark T. Ramsbey,  
a resident of 402 Cumulus Avenue, Sunnyvale, CA 94087; and

(5) Jeffrey A. Shields,  
a resident of 445 Kenmore Avenue, Sunnyvale, CA 94086; and

(6) Jean Y. Yang,  
a resident of 125 Connemara Way #17, Sunnyvale, CA 94087; and

(7) Emmanuel Lingunis,  
a resident of 330 Elan Village Ln. #406, San Jose, CA 95134.

(8) Angela T. Hui,  
a resident of 362 Pilgrim Loop, Fremont, CA 95039; and

(9) Jusuke Ogura,  
a resident of 10183 Denison Avenue, Cupertino, CA 95014; and

have invented certain new and useful improvements in:

**MEMORY WORDLINE HARD MASK**

and have executed a declaration or oath for an application for a United States patent disclosing and identifying the invention:



On the Date of Execution of Declaration for Patent Application set forth below adjacent to my signature;

WHEREAS Advanced Micro Devices, Inc. (hereinafter termed "Assignee"), a corporation of the State of Delaware, having a place of business at One AMD Place, Sunnyvale, California and Fujitsu Limited (hereinafter termed "Assignee"), a corporation of the Country of Japan, having a place of business at 1-1 Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa-ken, wish to acquire 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 jointly or severally by said Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, certificates of invention and other forms of protection thereon (hereinafter termed "patents") applied for or granted in the United States and/or other countries.

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

1. Said Inventors do hereby sell, assign, transfer and convey to said Assignees, the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply in any or all countries of the world for patents, certificates of inventions or other governmental grants on said invention, including the right to apply for patents pursuant to the International Convention for the Protection of Industrial Property or pursuant to any other convention, treaty, agreement or understanding; (c) in and to any and all applications filed and any and all patents, certificates of inventions or other governmental grants granted on said invention in the United States or any other country, including each and every application filed and each and every patent granted on any application which is a division, substitution, or continuation of any of said applications; (d) in and to each and every reissue or extension of any of said patents; and (e) in and to each and every patent claim resulting from a reexamination certificate for any and all of said patents.

2. Said Inventors hereby jointly and severally covenant and agree to cooperate with said Assignees to enable said Assignees to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and other countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, executing of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignees (a) for perfecting in said Assignees the right, title and interest herein conveyed; (b) for complying with any duty of disclosure; (c) for prosecuting any of said applications; (d) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (e) for filing and prosecuting applications for reissue of any of said patents; (f) for interference or other priority proceedings involving said invention; and (g) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, reexamination proceedings, compulsory licensing 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 Assignees.

3. The terms and covenants of this Assignment shall inure to the benefit of said Assignees, its successors, assigns and other legal representatives, and shall be binding upon said Inventors, their respective heirs, legal representatives and assigns.

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

IN WITNESS WHEREOF, the said Inventors have executed this instrument on the date of acknowledgement before the Notary Public as given below and delivered this instrument to said Assignees.

Date of Execution of Declaration for Patent Application: \_\_\_\_\_

2/25/02

(1) \_\_\_\_\_  
Arvind Halliyal

A. Halliyal

State of California )

County of Santa Clara )

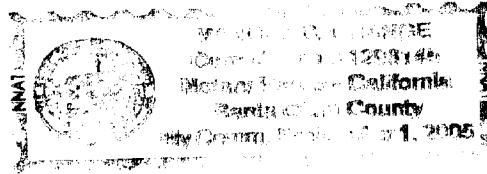
On February 25, 2002 before me, Ninona C. Orange, Notary Public,  
(name and title of officer)

personally appeared Arvind Halliyal, 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

Ninona C. Orange



\*\*\*\*\*

Date of Execution of Declaration for Patent Application: \_\_\_\_\_

2/21/02

(2) \_\_\_\_\_  
Tazrien Kamal

Tazrien Kamal

State of California )

County of Santa Clara )

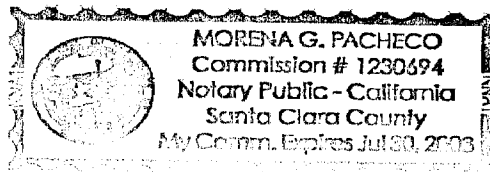
On February 21, 2002 before me, Morena G. Pacheco, Notary Public,  
(name and title of officer)

personally appeared Tazrien Kamal, 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

Morena G. Pacheco



\*\*\*\*\*

Date of Execution of Declaration for Patent Application: 2/13/02

(3)

Minh Van Ngo

State of California

County of Santa Clara

On 02-13-02

before me, WINONA C. ORANGE,  
(name and title of officer)

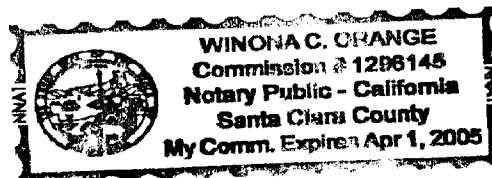
Notary Public

personally appeared Minh Van Ngo, 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

Winona C. Orange



\*\*\*\*\*

Date of Execution of Declaration for Patent Application: 2/19/02

(4)

Mark T. Ramsbey

State of California

County of Santa Clara

On February 19, 2002

before me, Morena G. Pacheco,  
(name and title of officer)

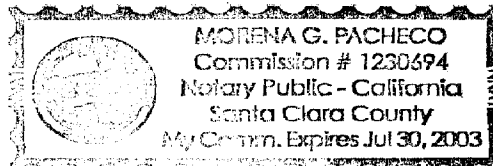
Notary Public

personally appeared Mark T. Ramsbey, 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

Morena G. Pacheco



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Date of Execution of Declaration for Patent Application: 2/20/02

(5) Jeffrey A. Shields  
Jeffrey A. Shields

State of California

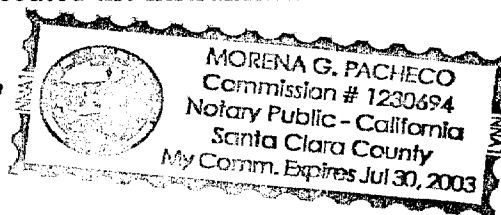
County of Santa Clara

On February 20, 2002 before me, Morena G. Pacheco, Notary Public,  
(name and title of officer)

personally appeared Jeffrey A. Shields, 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 Morena G. Pacheco



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Date of Execution of Declaration for Patent Application: 2/21/2002

(6) Jean Y. Yang  
Jean Y. Yang

State of California

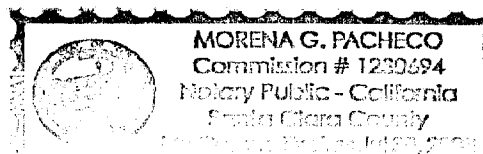
County of Santa Clara

On February 21, 2002 before me, Morena G. Pacheco, Notary Public,  
(name and title of officer)

personally appeared Jean Y. Yang, 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 Morena G. Pacheco



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Date of Execution of Declaration for Patent Application:

2/26/02  
(7) Emmanuil Lingunis  
Emmanuil Lingunis

State of California

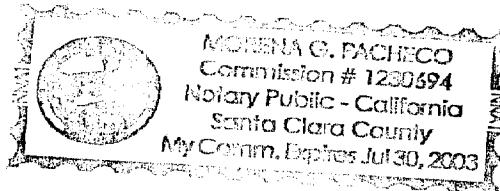
County of Santa Clara

On February 26, 2002 before me, Morena G. Pacheco, Notary Public  
(name and title of officer)

personally appeared Emmanuil Lingunis, 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 Morena G. Pacheco



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Date of Execution of Declaration for Patent Application:

2/21/02  
(8) Angela T. Hui  
Angela T. Hui

State of California

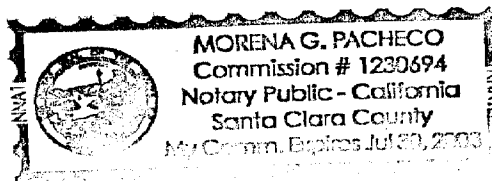
County of Santa Clara

On February 21, 2002 before me, Morena G. Pacheco, Notary Public  
(name and title of officer)

personally appeared Angela T. Hui, 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 Morena G. Pacheco



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Date of Execution of Declaration for Patent Application: 3/19/02

(9) Jusuke Ogura  
Jusuke Ogura

State of California

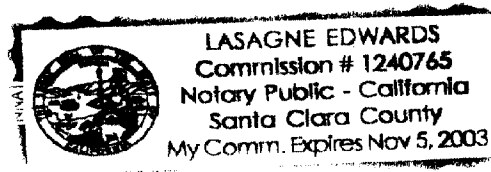
County of Santa Clara

On March 19, 2002 before me, Lasagne Edwards, notary public  
(name and title of officer)

personally appeared Jusuke Ogura, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(~~x~~) whose name(~~y~~) is/~~is~~ 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(~~n~~) on the instrument the person(~~x~~), or the entity upon behalf of which the person(~~y~~) acted, executed the instrument.

WITNESS my hand and official seal.

Signature Lasagne Edwards



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