

## 101014054 PATENTS ONLY

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U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

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To the Honorable Commissioner of Patents and Trademarks:	Please record the attached original documents or copy thereof
1. Name of conveying party(ies): Yue-Song He, Masaaki Higashitani, Hao Fang, Narbeh Derhacobian, Bill Cox, Kent Chang, Kelwin Ko, Maria Chow-Chan Additional name(s) of conveying party(ies) attached? Yes X No	2. Name and address of receiving party(ies):  Name: Advanced Micro Devices, Inc.  Address: One AMD Place Sunnyvale, California 94088
3. Nature of conveyance:    X	Name: Fujitsu Limited Address: 1-1 Kamikodanaka 4-chome Nakahara-Ku, Kawasaki-shi, Kanagawa-ken, JAPAN Additional name(s) & address(es) attached? Yes _X_ No
4. Application number(s) or patent number(s):	B. Patent No(s).:
A. Patent Application No.: Unknown	
Title: BARRIER LAYER DECREASES NITROGEN CONTAMINATION OF PERIPHERAL GATE REGIONS DURING TUNNEL OXIDE NITRIDATION Filed Date: Herewith	
Additional numbers attac	hed? Ves Y No
	te execution date of the application is: 2/10/99, 2/22/99, 2/24/99,
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total Number of applications and patents involved: 1 X \$40.00 each
Name: Martin C. Fliesler, Esq.	7. Total fee (37 CFR 3.41)\$ 40.00  X Check Enclosed
Address: Fliesler, Dubb, Meyer & Lovejoy	<del></del>
Four Embarcadero Center, Suite 400	8. Fee Authorization. Authorization is given to charge any additional fees or credit any
San Francisco, CA 94111	overpayment to Deposit Account No. 06-1325.
Telephone: <u>(415) 362-3800</u>	Copy. (A duplicate copy of this authorization is not enclosed.)
<ol> <li>Statement and signature.</li> <li>To the best of my knowledge and belief, the foregoing copy is a true copy of the original document.</li> </ol>	60
D. Benjamin Borson Attorney (Reg. No.: 42,349) Signature	March 30, 1989  Date #
10. Total number of pages to be recorded: _7 (1 page of	
	26 12

- 1 -

Attorney Docket No.: AMDI8346MCF/LEV/DBB dbb/amdi/8346/formal/006

260.001:101197 03/38/99#35:1

PATENT

## **JOINT TO CORPORATE ASSIGNMENT**

WHEREAS, the undersigned Inventors:

a resid	(1) <u>Yu</u> dent of	e-Song He 1381 Heckman Way SanJose (A 9514) and
a resid	(2) <u>Ma</u> dent of	1035 Aster De. #2119 Surry ude (A. 94086 ; and
a resid	(3) <u>F</u> dent of	lao Fang ; and
a resid	(4) <u>Na</u> dent of	1518 Williams Aul, Belmmt, CA, 94002
a resid	(5) <u>Bil</u> dent of	570 Meadow Avenue, Santa Clara, (A 95051
a resid	(6) <u>Ke</u> dent of	10355 Norwich Ave, Capertino, CA 95014
a resid	(7) <u>Ke</u> dent of	lwin Ko San Jose, California
		3427 San Saba Dr., San Jose CA 95148
have i	nvente	d certain new and useful improvements in:
		BARRIER LAYER DECREASES NITROGEN CONTAMINATION OF PERIPHERAL GATE REGIONS DURING TUNNEL OXIDE NITRIDATION
		ecuted a declaration or oath for an application for a United States patent didentifying the invention:
1.	_X_	On the Date of Execution of Declaration for Patent Application set forth below adjacent to my signature;
	Or	
2.	_	Said application having SC/Serial Number/, and filed on the day of, 19

Page 1

Attorney Docket No.:AMDI:FUJ 8346 MCF/DBB dbb/amdi:fuj834/formal/003

251.001:060498

PATENT REEL: 9877 FRAME: 0349 WHEREAS <u>Advanced Micro Devices</u>, <u>Inc.</u> (hereinafter termed "Assignee"), a corporation of the State of <u>Delaware</u>, having a place of business at One AMD Place, Sunnyvale, California and <u>Fujitsu Limited</u> (hereinafter termed "Assignee"), a corporation of the Country of Japan, having a place of business at <u>1-1 Kamikodanaka 4-chome</u>, <u>Nakahara-ku</u>, <u>Kawasaki-shi</u>, <u>Kanagawa-ken</u>, 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.

Page 2

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: 3/2/99
(1)(Inventor's signature)
State of California  County of Santa Clara
County of Santa Clara
On March 2, 1979 before me, Morena G. Molina, Notary Tublic, (name and title of officer)  personally appeared Yue Gorg He, 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/he/their authorized capacity(iee), and that by his/he/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  MOREMA G. MOUNCA Commission #10:53:80 Notary Public — Colifornid SANTA CLARA COUNTY My Comm. Expires Jul 19,1999
My Comm. Expires Jul 19,1999  *******************************
(2) <u>M. Lige-kiron</u> (Inventor's Signature)
(inventor's Signature)
State of California
County of Santa Clara
on March 24, 1999 before me, Morena G. Molina Notary Kublia (name and title of officer)
personally appeared <u>hasaki higashitani</u> 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. MOLINA Commission #1065389 Notary Public — California SANTA CLARA COUNTY My Comm. Expires Jul 19,1999
***************

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

Page 3

Attorney Docket No.:AMDI:FUJ 8346 MCF/DBB dbb/amdi:fuj834/formal/003

251.001:060498

**PATENT** 

conflict herewith.

Date of Execution of Declaration for Patent Application:3/24/89
10 Az 2
(Inventor's Signature)
State of California
County of Santa Clara
On March 24, 1999 before me, Morena G. Molina Notary tublic,
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
My Comm. Expires Jul 19, 1999
Date of Execution of Declaration for Patent Application: 3/24/49
(4) Se N.D. Jack.
(Inventor's Signature)
State of California
County of Mateo Santa Clara
On March 24, 1999 before me, Morera G. Molina Notary Kublia (name and title of officer)
personally appeared / Varben Derhacobian 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(iee), 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.  MORENA G. MOLINA Commission #1065389
Signature Notary Public — Collifornia SANTA CLARA COUNTY My Comm. Expires Jul 19,1999
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	(5) Willen P. Cox
	(Inventor's Signature)
personally appeared William P. Ox, pesatisfactory evidence) to be the person(s) whose racknowledged to me that (he)/she/they executed the s	ine, Wind A C. ORANGE  Commission of the person of the basis of the man of the person of the perso
Date of Execution of Declaration for	Patent Application: 2-24-99  6) Clany (Inventor's Signature)
personally appeared <u>Kent Chang</u> , pe satisfactory evidence) to be the person(s) whose n acknowledged to me that he/s <del>he/they</del> executed the sa	e, Morena a. Molina, Notary Public, (name and title of officer) ersonally known to me (or proved to me on the basis of name(s) is/are subscribed to the within instrument and ame in his/her/their authorized capacity(jas), and that by, or the entity upon behalf of which the person(s) acted,
WITNESS my hand and official seal.  Signature  ***********************************	MORENA G. MOUNA Commission #1065389 Notary Public — California SANIA CLARA COUNTY NO Comm. Expires Jul 19,1999 Patent Application: 2/10/99
C	7)(Inventor's Signature)
State of <u>California</u> County of <u>Sanfa Clara</u>	

Date of Execution of Declaration for Patent Application: 2-22-99

Page 5

Attorney Docket No.:AMDI:FUJ 8346 MCF/DBB dbb/amdi:fuj834/formal/003

251.001:060498

PATENT

$T_{1}$
on February 10, 1999 before me, Morena G. Molina, Notary Kublic
personally appeared kelwin Ko (name and title of officer)  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.
MORENA G. MOUNA
WITNESS my hand and official seal. Commission #1065389
Notary Public — California SANTA CLARA COUNTY
Signature My Comm. Explies Jul 19,1999
***************************************
Date of Execution of Declaration for Patent Application: 3/1/99
(8) Die Chan
(Inventor's Signature)
$\alpha$ $\alpha$ $\zeta$ .
State of California
County of Santa Clara
on March 1, 1999 before me, Morena G. Molina, Notary Public, (name and title of officer)
(name and title of officer)
personally appeared <b>Little Cheer Cheer</b> , 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.
Commission #1065389  Notary Public — California
Signature My Comm. Expires Jul 19.1999

## JOINT TO CORPORATE ASSIGNMENT

WHEREAS, the undersigned Inventors:

а	(1) resident	Yue-Song He of 1381 Heckman Way SanJose (A 9512) and
а	(2) <sub>-</sub> resident	Masaaki Higashitani of 1035 Aster Ave. #2119 Suxxy vde (A 94086 ; and
а	(3) resident	<u>Hao Fang</u> , of; and
а	(4) resident	of 1518 Williams And, Belmmt, CA, 94002
а	(5) resident	Bill Cox of 570 Meadow Avenue, Santa Clara, (A 95051
а	(6) resident	of 10355 Norwich Aue, cupertino, CA 95014
а	(7) resident	Kelwin Ko of San Jose, California
		Maria Chow-Chan of 3427 San Saba Dr., San Jose CA 95148
h	ave inve	nted certain new and useful improvements in:
		BARRIER LAYER DECREASES NITROGEN CONTAMINATION OF PERIPHERAL GATE REGIONS DURING TUNNEL OXIDE NITRIDATION
		executed a declaration or oath for an application for a United States patent and identifying the invention:
1	. <u>X</u>	On the Date of Execution of Declaration for Patent Application set forth below adjacent to my signature;
	Or	
2	2	Said application having SC/Serial Number/, and filed on the day of, 19

Page 1

Attorney Docket No.:AMDI:FUJ 8346 MCF/DBB dbb/amdi:fuj834/formal/003

251.001:060498

PATENT REEL: 9877 FRAME: 0355 WHEREAS <u>Advanced Micro Devices</u>, <u>Inc.</u> (hereinafter termed "Assignee"), a corporation of the State of <u>Delaware</u>, having a place of business at One AMD Place, Sunnyvale, California and <u>Fujitsu Limited</u> (hereinafter termed "Assignee"), a corporation of the Country of Japan, having a place of business at <u>1-1 Kamikodanaka 4-chome</u>, <u>Nakahara-ku</u>, <u>Kawasaki-shi</u>, <u>Kanagawa-ken</u>, 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.
- 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.

Page 2

date of acknowledgement before the Notary Public as given below and delivered this
Date of Execution of Declaration for Patent Application: 3/2/99
But of Exposure of Posterior of Assertation of Posterior
(1) YWLOG Le (Inventor's Signature)
State of California  County of Santa Clara
County of Sarka Clara
on March 2, 1979 before me, Morena G. Molina, Notary Public, (name and title of officer)
personally appeared <u>fuectory</u> , 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 has better executed the same in his/he/their authorized capacity(iee), and that by
his/he 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.  MORENA G. MOUREL Commission #1065389
Signature Movern L. Movern
****************
Date of Execution of Declaration for Patent Application: 3/24/99
< 1
(2) M. Digisliconi (Inventor's Signature)
State of California
County of <u>Santa Clara</u>
on March 24, 1999 before me, Morena G. Molina Notary Public,  (name and title of officer)  personally appeared Masaaki Higashitani personally known to me for 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. MOLINA Commission #1065389 Notary Public — California SANTA CLARA COUNTY My Comm. Expires Jul 19,1999
*******************

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

Page 3

Attorney Docket No.: AMDI: FUJ 8346 MCF/DBB dbb/amdi:fuj834/formal/003

conflict herewith.

251.001:060498

**PATENT** 

2/20/00
Date of Execution of Declaration for Patent Application: 3/34/33
(3) 2m 25
(Inventor's Signature)
State of <u>California</u>
County of Santa Clara
On March 24, 1999 before me, Morena G. Molina, Notary tublic,
satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and
acknowledged to me that he/s <del>he/the</del> y executed the same in his/ <del>her/the</del> ir authorized capacity( <del>ies)</del> , and that by his/h <del>er/thei</del> r 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.
Made and Mad
Signature SANTA CLARA COUNTY My Comm. Expires Jul 19,1999
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Data of Europetica of Declaration for Botant Application, 3/2 U 199
Date of Execution of Declaration for Patent Application: 3/24/99
(4) Se N.D. Jaroh.
(Inventor's Signature)
Calstati
State of Sta
County of Mateo Santa Clara
on March 24, 1999, before me, Morera G. Molina, Notary Rublic Malata Ladi (name and title of officer)
personally appeared Narbeh Dechacobian 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(iee), 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.  MORENA G. MOUNA
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Page 4

Attorney Docket No.:AMDI:FUJ 8346 MCF/DBB dbb/amdi:fuj834/formal/003

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(5)	Willem P. Cox
	tor's Signature)
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	chame and title of officer)  chown to me (or proved to me on the basis of the subscribed to the within instrument and sher/their authorized capacity() and that by
********	**************************************
Date of Execution of Declaration for Patent (6)(Inven-	Application:
State of  County of  Santa Clasa  On February 24, 1999 before me, More personally appeared Kent Chang, personally I satisfactory evidence) to be the person(s) whose name(s) is acknowledged to me that he/she/they executed the same in his his/her/their signature(s) on the instrument the person(s), or the executed the instrument.	known to me (or proved to me on the basis of s/are subscribed to the within instrument and s/her/their authorized capacity(jes), and that by
WITNESS my hand and official seal.  Signature  ***********************************	MORENA G. MOUNA Commission #1065389 Notary Public — California SANTA CLARA COUNTY My Comm. Expires Jul 19,1999  *******************************
(7)	
(Inven	ntor's Signature)
State of California  County of Santa Clara	

Date of Execution of Declaration for Patent Application: 2-22-99

Page 5

Attorney Docket No.:AMDI:FUJ 8346 MCF/DBB dbb/amdi:fuj834/formal/003

251.001:060498

**PATENT** 

$\cdot$
On February 10,1999 before me, Morena G. Molira, Notary Public (name and title of officer)  personally appeared felwin Ko 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.  WITNESS my hand and official seal.  Signature  MORENA G. MOUNA Commission #1065389 Notary Public — Colifornia SANTA CLARA COUNTY My Comm. Expires Jul 19,1999  *******************************
Total of Exposure of Education for Factoric Application,
(8) Die Chan
(Inventor's Signature)
State of California  County of Santa Clara
County of Santa Clara
on March 1, 1999 before me, Morena G. Molina, Notary Public,
personally appeared / 210 Chow Chow because of personally known to me for 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/he/their authorized canacity(ies), and that hy
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. MOUNA Commission #065389 Notary Public — Colifornia SANTA CLARA COUNTY
TOTAL

Page 6

Attorney Docket No.:AMDI:FUJ 8346 MCF/DBB dbb/amdi:fuj834/formal/003

RECORDED: 03/31/1999

251.001:060498

**PATENT**