### 504978216 06/26/2018

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5024962

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
AMIT MARATHE	02/24/2004
CONNIE PIN-CHIN WANG	02/24/2004
CHRISTY MEI-CHU WOO	02/24/2004
PAUL L. KING	02/24/2004

#### **RECEIVING PARTY DATA**

Name:	ADVANCED MICRO DEVICES, INC.
Street Address:	ONE AMD PLACE
Internal Address:	P.O. BOX 3453
City:	SUNNYVALE
State/Country:	CALIFORNIA
Postal Code:	94088-3453

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Patent Number:	7755194

#### **CORRESPONDENCE DATA**

**Fax Number:** (617)542-2241

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

**Phone:** 617-542-6000

Email: JRDAVIES@MINTZ.COM

Correspondent Name: MINTZ LEVIN

Address Line 1: ONE FINANCIAL CENTER

Address Line 4: BOSTON, MASSACHUSETTS 02111

ATTORNEY DOCKET NUMBER: 052416-001

NAME OF SUBMITTER: JACLYN DAVIES

SIGNATURE: /Jaclyn Davies/

DATE SIGNED: 06/26/2018

**Total Attachments: 5** source=7033940#page1.tif

PATENT 504978216 REEL: 046206 FRAME: 0317



PATENT REEL: 046206 FRAME: 0318



# Assignment abstract of title for Application 10811866

Invention title/Inventor Patent
METHOD OF FORMING COMPOSITE 7033940
BARRIER LAYERS WITH CONTROLLED Apr 25, 2006
COPPER INTERFACE SURFACE
ROUGHNESS
Amit Marathe, Connie Pin-Chin Wang,

**Application** 10811866 Mar 30, 2004

PCT International registration

# Assignments (1 of 1 total)

Christy Mei-Chu Woo, Paul L. King

**Assignment 1** 

Reel/frameExecution dateDate recordedPropertiesPages015165/0265Feb 24, 2004Mar 30, 200414

Publication

Conveyance

ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignors MARATHE, AMIT WANG, CONNIE PIN-CHIN WOO, CHRISTY MEI-CHU KING, PAUL L.

Assignee ADVANCED MICRO DEVICES, INC. ONE AMD PLACE P.O. BOX 3453 SUNNYVALE, CALIFORNIA 94088-3453 Correspondent MCDERMOTT, WILL & EMERY ARTHUR J. STEINER 600 13TH STREET, N.W. WASHINGTON, D.C. 20005-3096

> PATENT REEL: 046206 FRAME: 0319

FORM PTO-1595 (Rev. 10/02)	RECOR		U.S. DEPARTMENT OF Co Patent and Trade	
Docket No.: 50432-123 3-30-06	FAIENIS	2/13862 UNLY	ratent and Trade	mark Office
To the Honorable Commissioner for Pate	ents and Trademarks: Ple	ease record the attache	d original documents or copy th	erep:
1. Name of Conveying Party(ies):		1	ss of receiving party(ies):	s. P 86(
Amit MARATHE, Connie Pin-Chin WAN	G, Christy Mei-Chu	Name: ADVAN	NCED MICRO DEVICES, INC	
WOO, Paul L. KING				10/8
		Address: One AM	MD Place	230
Additional name(s) of conveying party(ies) at	tached? 🗌 Yes 🔲 No	P.O. Bo	x 3453	T
3. Nature of Conveyance:		Sunnyva	ale, CA 94088-3453	
	Merger			
☐ Security Agreement ☐	Change of Name			
☐ Other				
Execution Date: February 24, February 24,	February 24, February			
24, 2004				
		Additional name(s)	& address(es) attached?  Ye	s 🗌 No
4. Application number(s) or patent number(s)	): 108118	Rbb		
If the document is being filed together with	h a new application, the e	xecution date of the ap	oplication is: February 24,	February 24,
			February 24,	February 24,
		1	2004	
A. Patent Application No(s).		B. Patent No(s).		
	Additional numbers attac	hed? Yes No		
5. Name and address of party to whom corres	spondence	6. Total number of	applications and patents involve	ed: 1
concerning document should be mailed:				
Name: MCDERMOTT, WILL & EMER	RY	7. Total fee (37 CF)	R 3.41)	\$40.00
Internal Address:		☐ Enclosed		
		Authorized to	o be charged to deposit account	
Street Address: 600 13th Street, N.W.		8. Deposit account i	number:	
		500417		
City: Washington State: D. C.	Zip: 20005-3096			
705/2004 GTBH11 00000084 500417 10811866				<del></del>
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To the best of my knowledge and bel	ief, the foregoing inform	ition is true and corre	ct and any attached copy is a tr	ие сору
of the original document.	^ '	\C\		
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Arthur J. Steiner, 26,106		1/ Jewson	March 30, 2	004
Name and Registration No. of Person Signing	•	Signature	Date	
	To	otal number of pages in	ncluding cover sheet: 4	
OMB No. 0651-0027 (exp. 6/30/2005)				

Docket No.: 50432-123

## **ASSIGNMENT**

WHEREAS WE, Amit Marathe, Connie Pin-Chin Wang, Christy Mei-Chu Woo and Paul L. King of Milpitas, CA; Menlo Park, CA; Cupertino, CA and Mountain View, CA, respectively, have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled COMPOSITE BARRIER LAYERS WITH CONTROLLED COPPER INTERFACE SURFACE ROUGHNESS, executed by us on the date of execution of this document, as shown below, and filed concurrently herewith;

AND WHEREAS, Advanced Micro Devices, Inc., a corporation of the State of Delaware and having an address of One AMD Place, P. O. Box 3453, Sunnyvale, California 94088-3453 is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, We do hereby sell, assign, transfer and set over unto Advanced Micro Devices, Inc., its legal representatives, successors, and assigns, the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including the right of priority and including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, We hereby agree with the said assignee that We will not execute any writing or do any act whatsoever conflicting with these presents, and that We will, at any time upon request, without further or additional consideration but at the expense of said assignee, execute such additional assignments and other writings and do such additional acts as said assignee may deem necessary or desirable to perfect the assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and assignee;

AND We request the Commissioner for Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to said Advanced Micro Devices, Inc., its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

2/24/04	A.P. Marathe	
Date	Amit Marathe	
2/24/04	Di Mua	
Date	Connie Pin Chin Wang	
2-24- Don 4		
Date	Christy Mei-Chu Woo	
2/24/04	Paul C. Km	<i>a</i> .
Date	Paul L. King	<del> </del>
STATE OF CALIFORNIA		
COUNTY OF Santa Clara) SS:		
	(1. 0.0)	Notary
On 170. 29, 2004 before me, personally appeared Amit Marathe, personally	WINONA C. ORANGE	e, Public,
satisfactory evidence) to be the person(s) whose	name(s)(is) are subscribed to the	e within instrument
and acknowledged to me that (he)/she/they	executed the same in his	er/their authorized
capacity(ies), and that by his her/their signature upon behalf of which the person(s) acted, execute	(8) on the instrument the person d the instrument.	on(8), or the entity
WITNESS my hand and official seal.		
(sig	nature of Notary)	(seal of Notary)
My commission expires AP(1), 200	5	WINONA C. ORANGE Commission # 1296145
	- Barret 170 mg	Notary Public - California Santa Clara County
	My	Comm. Expires Apr 1, 2005
STATE OF CALIFORNIA		
COUNTY OF Santa Clara ) SS:		
	WINDNA C. DRANGE	Horany
On 180. 14, 2004 before me, personally appeared Connie Pin-Chin Wang, personally appeared Connie Pin-Chin Wang, personal before me,	WINDNA LUKANGE,	to me on the basis
of satisfactory evidence) to be the person( $\sigma$ )	whose name(A) Galora subscrit	and to the within
instrument and acknowledged to me that the the capacity (i.e.s.), and that by his her their signature	bey executed the same in this has	er/their authorized
upon behalf of which the person(s) acted, executed	I the instrument.	ongs), or the entity
WITNESS my hand and official seal.		
Win a Color of the		
(sign	nature of Notary)	(seal of Notary)
My commission expires ARI 1, 20	05	WINONAC
V		WINONA C. ORANGE Commission # 1296145 Notary Public Orange
		Notary Public - California Santa Clara County Comm. Expires Apr 1, 2005

PATENT PREEL: .90469266 FRANCE: 9392

STATE OF CALIFORNIA )
COUNTY OF Santa Clarea) SS:
On 736.24, 2004 before me, WINDA C. DRANGE Public, personally appeared Christy Mei-Chu Woo, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person 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 (i.e., 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.
(seal of Notary) (seal of Notary)
My commission expires
STATE OF CALIFORNIA ) Santa Clara County My Comm. Expires Apr 1 2005
COUNTY OF Santa Clary) SS:
Colonia
on F26.24, 2004 before me, WINONA C. ORANGE, Public
personally appeared Paul L. King, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person (x) whose name (x) is are subscribed to the within instrument
personally appeared Paul L. King, personally known to me (or proved to me on the basis of
personally appeared Paul L. King, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person() 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(is)), and that by (his/her/their signature(s)) on the instrument the person(s), or the entity
personally appeared Paul L. King, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(x) whose name(x) is are subscribed to the within instrument and acknowledged to me that (he) she/they executed the same in (his/her/their authorized capacity(iox), and that by (his/her/their signature(x)) on the instrument the person(x), or the entity upon behalf of which the person(x) acted, executed the instrument.
personally appeared Paul L. King, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(x) whose name(x) is are subscribed to the within instrument and acknowledged to me that (he) she/they executed the same in his/her/their authorized capacity(iex), and that by his/her/their signature(x) on the instrument the person(x), or the entity upon behalf of which the person(x) acted, executed the instrument.  WITNESS my hand and official seal.  (signature of Notary) (seal of Notary)  My commission expires
personally appeared Paul L. King, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(**) whose name(**) is are subscribed to the within instrument and acknowledged to me that (he) she/they executed the same in his/her/their authorized capacity(ie**), and that by (his/her/their signature(**) on the instrument the person(**), or the entity upon behalf of which the person(**) acted, executed the instrument.  WITNESS my hand and official seal.  (seal of Notary)