PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

nic Version v1.1 EPAS ID: PAT3110020

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOSEPH L. GREATHOUSE	09/04/2014
MITESH R. MESWANI	09/04/2014
SOORAJ PUTHOOR	09/04/2014
DMITRI YUDANOV	09/04/2014
JAMES M. O'CONNOR	09/22/2014

RECEIVING PARTY DATA

Name:	ADVANCED MICRO DEVICES, INC.
Street Address:	ONE AMD PLACE
City:	SUNNYVALE
State/Country:	CALIFORNIA
Postal Code:	94085

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14490213

CORRESPONDENCE DATA

Fax Number: (215)568-6499

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: 215-568-6400

Email: Hlannuzzi@vklaw.com

Correspondent Name: VOLPE AND KOENIG, P.C.

Address Line 1: 30 S 17TH STREET

Address Line 2: UNITED PLAZA, SUITE 1800

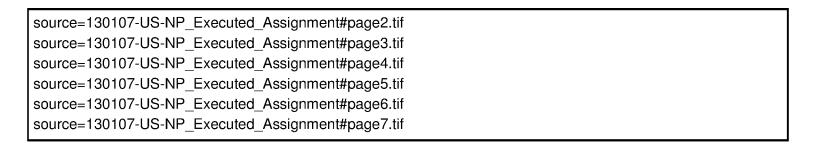
Address Line 4: PHILADELPHIA, PENNSYLVANIA 19103

ATTORNEY DOCKET NUMBER:	AMD-130107-US-NP
NAME OF SUBMITTER:	STEVEN J GELMAN
SIGNATURE:	/Steven J. Gelman/
DATE SIGNED:	11/17/2014

Total Attachments: 7

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503063418 PATENT REEL: 034183 FRAME: 0042



PATENT REEL: 034183 FRAME: 0043

AMD Reference No. 130107-US-NP

ASSIGNMENT OF PATENT RIGHTS

This is an assignment of patent rights between inventor(s) Joseph L. Greathouse, Mitesh R. Meswani, Sooraj Puthoor, Dmitri Yudanov, and James. M. O'Connor (hereinafter referred to as the "Inventor(s)") and Advanced Micro Devices, Inc., having a place of business at One AMD Place, Sunnyvale, California, USA (hereinafter referred to as the "Assignee").

WHEREAS, Inventor(s) are named as inventors in the patent application filed in the United States of America on September 18, 2014, entitled HETEROGENEOUS FUNCTION UNIT DISPATCH IN A GRAPHICS PROCESSING UNIT, having application no. 14/490,213, and having a docket number of AMD-130107-US-NP (hereinafter referred to as the "Application"); and

WHEREAS, Assignee has a desire to acquire all rights, title, and interest in the invention(s) disclosed in the Application (hereinafter referred to as the "Invention(s)"), including any rights, title, and interest in the Invention(s) not previously transferred to Assignee through prior agreement.

NOW, THEREFORE, the parties agree as follows:

- 1. To the extent that Inventor(s) are subject to a prior agreement transferring rights, title, and/or interest in the Invention(s) to the Assignee, Inventor(s) hereby confirm such transfer.
- 2. To the extent that Inventor(s) retain any rights, title, or interest in the Invention(s) not vested in the Assignee on the date(s) of execution of this Assignment, Inventor(s) hereby assign and otherwise transfer to the Assignee their entire right, title, and interest, throughout the world, in and to: the Invention(s), including any patent applications, patents, invention registrations, and equivalents thereof (including any and all provisional, international, regional, and national patents and patent applications, and all divisions, continuations, continuations-in-part, renewals, reissues, reexams, substitutes and extensions thereof), for the Invention(s) and all rights to claim priority thereto. Inventor(s) further assign and otherwise transfer to Assignee all causes of action and remedies arising under any patent or patent application for the Invention(s) prior to, on,

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AMD Reference No. 130107-US-NP

or after the date(s) of execution of this Assignment. Inventor(s) shall not be entitled to an accounting for any causes of action or remedies pursued by Assignee.

- 3. The transfers set forth in Paragraphs 1 and 2 above are in consideration for the sum of at least one U.S. dollar (US\$1) (or its equivalent) and/or other consideration for which both parties acknowledge to be valuable. Such consideration includes but is not limited to at least one of the following: employment, an independent contractor agreement, monetary payment, or other benefit hereby acknowledged as received.
- 4. Inventor(s) hereby authorize and request the Commissioner of Patents and Trademarks, or equivalent thereof, to issue the patent for the Invention, and all resulting patents therefrom, insofar as the Inventor(s)' interest is concerned, to the Assignee.
- 5. Inventor(s) further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect Assignee's rights, title, and interest in the Invention(s).
- 6. Inventor(s) hereby authorize Assignee, its successors and assigns, its legal representatives, or anyone the Assignee may properly designate, to insert in this Assignment of Patent Rights the filing date and/or application number of the Application when ascertained.
- 7. Inventor(s) hereby further agree to, with respect to any patent application or patent for the Invention(s), at the expense of the Assignee:
 - i) testify in any legal proceedings.
 - ii) sign all lawful papers,
 - iii) execute all divisional, continuation, continuation-in-part, reissue, reexamination, and substitute applications,
 - iv) make all lawful oaths, and assist in vesting title in the Assignee and to aid the Assignee to obtain and enforce proper protection for the subject matter of the Invention(s) in all countries and regions, and
 - v) notify Assignee promptly (by facsimile or first class mail) of any subpoena or contact by any person other than Assignee or its agents regarding the Invention or resultant patent(s) issuing therefrom, and in any event at least one week prior to any deposition, legal inquiry or legal proceeding relating to the above identified invention.

3249403-1

Inventor: Joseph L. Greathouse Joseph Greathouse (Print Name)

9/4/2014 (Date) State of: County of: On September 4.2014 before me, (insert date) (insert name and title of the notarizing officer) personally appeared Joseph GCE CANNESSE who 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. I certify under PENALTY OF PERJURY under the laws of the State of <u>ছিন্তির</u> that the foregoing paragraph is true and correct. WITNESS my hand and official seal. (NOTARY SEAL) ANGELA WITHROW My Commission Expires

This assignment is executed on the date(s) of which the Inventor(s) have signed.

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January 25, 2017

Inventor: Mitesh R. Meswa	ni	
M.P. Herry	(Signature)	<u>09/04/2015</u> (Date)
MITESH R. MESWI	<u>∖w≀</u> (Print Name)	
State of:	<u>Teyas</u>)	
County of:	<u> </u>	
On <u>44-5-5-September</u> (insert date)	<u>৭২০খ</u> before me,	
(Insert name and t	itle of the notarizing offic	er) Public
name(s) is/are subscribed he/she/they executed the s	basis of satisfactory evento the within instruments same in his/her/their aunthe instrument the per	vidence to be the person(s) whose ent and acknowledged to me that ithorized capacity(ies), and that by son(s), or the entity upon behalf of
I certify under PENALTY OF that the foregoing paragraph		ws of the State of <u>Texas</u>
WITNESS my hand and offi	cial seal.	
(NOTARY SEAL)	Signature: ៉ូ	Constitution of the second
	MAN (A)	IGELA WITHROW Commission Expires Inuary 25, 2017

Inventor: Sooraj Puthoor		
Ruthodioslós SOORAT PUTHOOR	(Signature) (Print Name)	<u>09/04/2014</u> (Date)
State of:	TEXAS	
County of:	(ZiaanT	
On <u>Secondored 4, 2</u> (insert date)	before me,	
(insert name and tit	le of the notarizing offic	<u>cy Paolic</u> er)
name(s) is/are subscribed he/she/they executed the sa	pasis of satisfactory ever to the within instrume ame in his/her/their au the instrument the per	ridence to be the person(s) whose ent and acknowledged to me that thorized capacity(ies), and that by son(s), or the entity upon behalf of
I certify under PENALTY OF that the foregoing paragraph		ws of the State of <u>Texas</u>
WITNESS my hand and offic	ial seal.	
(NOTARY SEAL)	Signature:	
	ANG My Coi	ELA WITHROW nmission Expires uary 25, 2017

3249403-1

PATENT REEL: 034183 FRAME: 0048

Inventor: Dmitri Yudanov		्रिट्र (Date)
State of:	TAKOS	
County of:	<u></u>	
On <u>Scotember 14.27</u> (insert date)	before me,	
(insert name and til	tle of the notarizing officer)	Carrie C
who proved to me on the l name(s) is/are subscribed he/she/they executed the s	basis of satisfactory evidence to the within instrument and a ame in his/her/their authorized the instrument the person(s), or xecuted the instrument.	cknowledged to me that capacity(ies), and that by
I certify under PENALTY OF that the foregoing paragraph	PERJURY under the laws of the is true and correct.	State of Texas
WITNESS my hand and offic	cial seal.	
(NOTARY SEAL)	Signature:	
	My Comm	WITHROW Ission Expires v 25, 2017

Inventor: James M. O'Connor		
James M. O'Conner	(Signature) (Print Name)	<u>9/22/14</u> (Date)
Witness # 1: - Blattery NILADRISH CHATTERJEE	(Sìgnature) (Print Name)	<u>9 22 14</u> (Date)
Witness # 2:		
Matthew D. Sindaje	(Signature) (Print Name)	<u>422/14</u> (Date)