

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ZIYAD HAKURA	09/30/2013
JEROME F. DULUK JR.	09/30/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	NVIDIA CORPORATION
<b>Street Address:</b>	2701 SAN TOMAS EXPRESSWAY
<b>City:</b>	SANTA CLARA
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95050
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15960332
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(408)715-1201
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<b>ATTORNEY DOCKET NUMBER:</b>	NVDA/SC130119USC1
<b>NAME OF SUBMITTER:</b>	JOHN C. CAREY
<b>SIGNATURE:</b>	/John C. Carey/
<b>DATE SIGNED:</b>	04/23/2018
<b>Total Attachments: 2</b>	
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source=SC130119USC1_Assignment#page2.tif	

**ASSIGNMENT FOR APPLICATION FOR PATENT**

WHEREAS:

Ziyad S. HAKURA, residing at  
704 Tennyson Drive  
Gilroy, CA 95020

Jerome F. DULUK, Jr., residing at  
950 California Avenue  
Palo Alto, CA 95303

(hereinafter referred to as Assignors), have invented a certain invention entitled:

**TWO-PASS CACHE TILE PROCESSING FOR VISIBILITY TESTING IN A  
TILE-BASED ARCHITECTURE**

enclosed herewith or for which application for Letters Patent in the United States under  
Application No. \_\_\_\_\_, filed on \_\_\_\_\_, and

WHEREAS, NVIDIA Corporation, a corporation of the State of Delaware, having a place of  
business at 2701 San Tomas Expressway, Santa Clara, CA 95050 (hereinafter referred to as Assignee),  
is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to  
as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all  
embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to  
any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as  
Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said  
Assignors to have been received in full from said Assignee:

1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive  
right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for  
patents on said Invention in any and all countries pursuant to the International Convention for the  
Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all  
Patents granted on said Invention in any and all countries and groups of countries, including each and  
every Application filed and each and every Patent granted on any application which is a conventional,  
division, substitution, or continuation of said Application; and (d) in and to each and every reissue or  
extension of any of said Patents.

2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable  
said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in  
any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt  
production of pertinent facts and documents, giving testimony, execution of petitions, oaths,  
specifications, declarations or other papers, and other assistance all to the extent deemed necessary or  
desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed;  
(b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, conventional,  
divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting  
applications for reissuance of any of said Patents; (e) for interference or other priority proceedings  
involving said Invention; and (f) for legal proceedings involving said Invention and any application  
thereof and any Patents granted thereon, including without limitation opposition proceedings,  
cancellation proceedings, priority contests, public use proceedings, infringement actions and court

actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.

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

5. I hereby authorize and request my attorneys, Patterson & Sheridan LLP, of 3040 Post Oak Blvd, Suite 1500, Houston Texas 77056, to insert above in parentheses (Application No. and Filing Date) the filing date and application number of said application when known.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1) Sept 30, 2013   
ZIYAD S. HAKURA

2) Sept 30, 2013   
JEROME F. DULUK, JR.