

PATENT ASSIGNMENT

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------|----------------|
| Donald A. Bittel | 08/22/2006 |
| Paul D. MacDougal | 08/21/2006 |
| Manas Mandal | 08/22/2006 |
| Colyn S. Case | 08/21/2006 |

RECEIVING PARTY DATA

| | |
|-----------------|---------------------------|
| Name: | NVIDIA Corporation |
| Street Address: | 2701 San Tomas Expressway |
| City: | Santa Clara |
| State/Country: | CALIFORNIA |
| Postal Code: | 95050 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 11467132 |

CORRESPONDENCE DATA

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Correspondence will be sent via US Mail when the fax attempt is unsuccessful.
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 Email: pasmiley@townsend.com
 Correspondent Name: Townsend and Townsend and Crew LLP
 Address Line 1: Two Embarcadero Center, 8th Floor
 Address Line 4: San Francisco, CALIFORNIA 94111

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|-------------------------|---------------------|
| ATTORNEY DOCKET NUMBER: | 019680-026000US |
| NAME OF SUBMITTER: | Cathy E. Cretsinger |

Total Attachments: 4
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ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Donald A. Bittel of 2169 Wood Hollow Court, San Jose, CA 95138; Paul MacDougal of ; Manas Mandal of 3733 Carlson Circle, Palo Alto, CA 94306; and Colyn S. Case of 345 Davis Hill Road, Hyde Park, VT 05655, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: RASTER OPERATIONS UNIT WITH INTERLEAVING OF
READ AND WRITE REQUESTS USING PCI EXPRESS

Date(s) of execution of Declaration: August 21 and 22, 2006

Filing Date: August 24, 2006

Application No.: 11/467,132 ; and

WHEREAS, NVIDIA Corporation, a corporation of the state of Delaware, located at 2701 San Tomas Expressway, Santa Clara, CA 95050, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignors hereby authorize and request Townsend and Townsend and Crew LLP, Two Embarcadero Center, Eighth Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: 08/22/06

Donald A. Bittel
Donald A. Bittel

Dated: _____

Paul D. MacDougal

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Donald A. Bittel of San Jose, California; Paul MacDougal of Raleigh, North Carolina; Manas Mandal of Palo Alto, California; and Colyn S. Case of Hyde Park, Vermont, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

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For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

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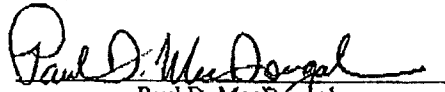
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IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: _____

Donald A. Bittel

Dated: 8/21/06


Paul D. MacDougal

Assignment

Attorney Docket No.: 019680-026000US

Page 2

Dated: AUG 22, 2006

M. Mandal
Manas Mandal

Dated: _____

Colyn S. Case

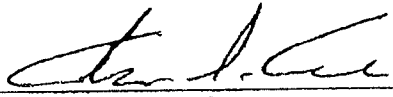
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Dated: _____

Dated: 8/21/06

Manas Mandal



Colyn S. Case

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