506186996 08/04/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT6233736

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XIAOFEI CHANG	08/01/2020
MANUEL GAUTHO	07/30/2020

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:	16941409

CORRESPONDENCE DATA

Fax Number: (408)715-1201

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: 4087151211

Email: sjohnson@artegislaw.com, algdocketing@artegislaw.com

Correspondent Name: ARTEGIS LAW GROUP LLC

Address Line 1: 710 LAKEWAY DRIVE

Address Line 2: **SUITE 185**

Address Line 4: SUNNYVALE, CALIFORNIA 94085

ATTORNEY DOCKET NUMBER:	NVIA20SC0188US1
NAME OF SUBMITTER:	JOHN C. CAREY
SIGNATURE:	/John C. Carey/
DATE SIGNED:	08/04/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 4

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> **PATENT REEL: 053395 FRAME: 0736** 506186996

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PATENT REEL: 053395 FRAME: 0737

ASSIGNMENT FOR APPLICATION FOR PATENT WITH DECLARATION STATEMENT

WHEREAS:

Names and Addresses of Inventors:

1)	Xiaofei CHANG San Mateo, CA	2)	Manuel GAUTHO Los Gatos, CA
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(hereinafter referred to as Assignors), have invented a certain invention entitled:

FAST RESIDUE COMPUTATION FOR MODULO OPERATIONS WITHOUT DIVISION VIA MERSENNE NUMBERS

enclosed herewith or for whi	ch application for Le	tters Patent in the	United States was	filed on
July 28, 2020	under Serial No.	16/941,409	; and	

WHEREAS, **NVIDIA CORPORATION**, a corporation of the State of Delaware, having a place of business at 2701 San Tomas Expressway, Santa Clara, California 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 therefore 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.

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	The term and covenants of this agreement shall inure to the benefit of said Assignee, assigns and other legal representatives, and shall be binding upon said Assignors, a heirs, legal representatives and assigns.
4, enter into any	Said Assignors hereby warrant and represent that they have not entered and will not assignment, contract, or understanding in conflict herewith.
Assignors here	In the event that the filing date and/or Application No. of said Invention are not time Assignors execute this document, and if such information is deemed necessary, by authorize and request the attorney/agent(s) of Artegis Law Group, LLP, to insert and/or Application No. of said application where needed.
8. checked):	This declaration is directed to the attached application, or (if following box is
	[X] United States application or PCT international application number 16/941,409 filed on July 28, 2020 .
Asab	elow named inventor, I hereby declare that:
	The above-identified application was made or authorized to be made by me;
inventi	I believe that I am the original inventor or an original joint inventor of a claimed on in the application; and
under	I acknowledge that any willful false statement made in this declaration is punishable section 1901 of title 18 by fine or imprisonment of not more than 5 years, or both.
instrun	IN WITNESS WHEREOF, the said Assignors have executed and delivered this nent to said Assignee on the dates indicated below.
	7/1/ww (DATE)
	Xiaofei CHANG

(DATE)

2)

Manuel GAUTHO

ASSIGNMENT FOR APPLICATION FOR PATENT WITH DECLARATION STATEMENT

WHEREAS:

Names and Addresses of Inventors:

1)	Xiaofei CHANG San Mateo, CA	2)	Manuel GAUTHO Los Gatos, CA
----	--------------------------------	----	--------------------------------

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

FAST RESIDUE COMPUTATION FOR MODULO OPERATIONS WITHOUT DIVISION VIA MERSENNE NUMBERS

enclosed herewith	or for which application for L	etters Patent in the	United States	was filed on
July 28, 2020	under Serial No.	16/941,409	; and	

WHEREAS, **NVIDIA CORPORATION**, a corporation of the State of Delaware, having a place of business at 2701 San Tomas Expressway, Santa Clara, California 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 therefore 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.

Page 1 of 2

- 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. In the event that the filing date and/or Application No. of said Invention are not entered at the time Assignors execute this document, and if such information is deemed necessary, Assignors hereby authorize and request the attorney/agent(s) of **Artegis Law Group, LLP**, to insert the filing date and/or Application No. of said application where needed.
- 6. This declaration is directed to the attached application, or (if following box is checked):

[X]	United States application	or PCT interi	national application numb	er
	16/941,409	filed on	July 28, 2020	

As a below named inventor, I hereby declare that:

The above-identified application was made or authorized to be made by me;

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application; and

I acknowledge that any willful false statement made in this declaration is punishable under section 1001 of title 18 by fine or imprisonment of not more than 5 years, or both.

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

1)	(DATE)		
		Xiaofei CHANG	
2)	Thursday, July 30, 2020		

Manuel GAUTHO