505827424 12/18/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5874254

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CARL JACOB MUNKBERG	12/09/2019
JON NIKLAS THEODOR HASSELGREN	12/09/2019
ANJUL PATNEY	12/10/2019
MARCO SALVI	12/16/2019
AARON ELIOT LEFOHN	12/17/2019
DONALD LEE BRITTAIN	12/05/2019

RECEIVING PARTY DATA

Name:	NVIDIA CORPORATION
Street Address:	2788 SAN TOMAS EXPRESSWAY
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95051

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16718607

CORRESPONDENCE DATA

Fax Number: (312)616-5700

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: 312-616-5600

Email: assignments@leydig.com

Correspondent Name: LEYDIG, VOIT & MAYER (WALNUT CREEK)

Address Line 1: 180 N. STETSON

Address Line 2: TWO PRUDENTIAL PLAZA, SUITE 4900

Address Line 4: CHICAGO, ILLINOIS 60601

ATTORNEY DOCKET NUMBER:	512999/19-SV-0183-US03
NAME OF SUBMITTER:	STEPHANIE L. WINNER
SIGNATURE:	/Stephanie L. Winner/
DATE SIGNED:	12/18/2019

PATENT 505827424 REEL: 051365 FRAME: 0225

Total Attachments: 15 source=Signed_Assignment_19-SV-0183US03#page1.tif source=Signed Assignment 19-SV-0183US03#page2.tif source=Signed Assignment 19-SV-0183US03#page3.tif source=Signed_Assignment_19-SV-0183US03#page4.tif source=Signed_Assignment_19-SV-0183US03#page5.tif source=Signed Assignment 19-SV-0183US03#page6.tif source=Signed_Assignment_19-SV-0183US03#page7.tif source=Signed_Assignment_19-SV-0183US03#page8.tif source=Signed Assignment 19-SV-0183US03#page9.tif source=Signed_Assignment_19-SV-0183US03#page10.tif source=Signed_Assignment_19-SV-0183US03#page11.tif source=Signed Assignment 19-SV-0183US03#page12.tif source=Signed Assignment 19-SV-0183US03#page13.tif source=Signed_Assignment_19-SV-0183US03#page14.tif source=Signed_Assignment_19-SV-0183US03#page15.tif

PATENT REEL: 051365 FRAME: 0226

NAIDIY CORLORATION V221CAMENT VOREENEAT - AGUITAME	
WHEREAS, I, an undersigned individual, have invented certain invention(s) described in an application for Letters Patent (the "Application") in:	
∃ the United States □ another jurisdiction	
Ξ enclosed herewith or □ previously filed on date 12/18/2019 under Serial No. 16/718,607 ;	
with docket number and title: 19-SV-0183-US03/S12999; NEURAL NETWORK SYSTEM WITH TEMPORAL FEEDBACK FOR DENOISING OF RENDERED SEQUENCES.	
WHEREAS, NVIDIA Corporation, a corporation of the State of Delaware, having a place of business at 2788 San Tomas Expressway, Santa Clara, CA 95051; U.S.A. ("NVIDIA"), desires to acquire the entire right, title, and interest in and to the invention(s) disclosed in the Application and all embodiments of such invention(s) previously conceived, made, or discovered by me during my employment with or within the scope of my work in any capacity for NVIDIA (collectively, the "Inventions"), and in and to the Application and any and all other applications for utility patents, utility models, inventor's certificates, and other forms of invention protection or rights for the Inventions in any and all countries and groups of countries (collectively, the "Applications"), and in and to any and all patents, inventors certificates, and other forms of invention protection or rights arising therefrom (the "Patents").	
NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by me to have been received in full from NVIDIA:	
1. I hereby sell, assign, transfer and convey to NVIDIA the entire right, title and interest (a) in and to the Inventions and the Application; (b) in and to all rights to apply for patents and all other forms of invention protection or rights on the Inventions in any and all countries pursuant to the Paris Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, or otherwise; (c) in and to any and all Applications filed an any and all Patents granted on the Inventions 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, continuation, or continuation-in-part of any of the Applications; and (d) in and to each and every reissue or extension of any of the Patents.	d
2. I hereby covenant and agree to cooperate with NVIDIA to enable NVIDIA to enjoy to the fullest extent the right, title and interest to the Inventions herein conveyed in any and all countries and groups of countries. My cooperation shall include prompt production of pertinent facts and documents, giving testimony, executing petitions, oaths, specifications, declarations or other papers, and providing other assistance to the extent deemed necessary or desirable by NVIDIA (a) for perfecting in NVIDIA the right, title and interest herein conveyed; (b) for prosecuting the Applications; (c) for filing and prosecuting substitute, conventional, divisional, continuation, continuation-in-part, or additional applications covering the Inventions; (d) for filing and prosecuting application for reexamination or reissuance of any of the Patents; (e) in assisting NVIDIA in any pre-grant or post-grant proceeding involving any of the Inventions, Applications, or Patents; and (f) in assisting NVIDIA in any court or administrative proceedings involving any of the Inventions, Applications, or Patents, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, and infringement actions; provided, however, that reasonable expenses incurred by me in providing such cooperation shall be paid for by NVIDIA.	8
3. I hereby agree that the terms and covenants of this Assignment Agreement (the "Agreement") shall into the benefit of NVIDIA, its successors, assigns and other legal representatives, and shall be binding upon me, my heirs, my legal representatives, and my assigns.	100
NVIDIA Corporation Assignment Agreement Page 1 of 3	سد

PATENT REEL: 051365 FRAME: 0227

- 4. I hereby warrant and represent that I have not entered into and will not enter into any assignment, license, contract, or understanding in conflict herewith.
- 5. I hereby agree that if any provision of this Agreement is deemed invalid or otherwise unenforceable, the remaining provisions of this Agreement shall remain valid, enforceable, and binding, and the invalid or otherwise unenforceable provision shall be deemed to be replaced by a provision that is valid and enforceable and that comes closest to expressing the intent expressed by the invalid or unenforceable provision.
- 6. I hereby agree that this Agreement contains the entire understanding between NVIDIA and me relating to the subject matter contained herein, and supersedes all prior and collateral communications and understandings between NVIDIA and me.
- 7. In the event that the filing date or application number of the Application is not entered at the time I execute this document, and if such information is deemed necessary, I hereby authorize NVIDIA, its successors and assigns, its legal representatives, or anyone it properly designates to enter above such filing date or application number.

(Printed legal name of inventor) Carl Jacob	
(Inventor's signature) <u> </u>	10ate) 1019 - 12 - 09
	nas Expressway, Santa Clara, CA 95051
(Printed legal name of inventor) <u>Ion Niklas</u>	
(Inventor's signature) <u>Z</u>	<u> </u>
(Inventor's mailing address) 2788 San Ton	nas Expressway, Santa Clara, CA 95051
(Printed legal name of inventor) Anjul Patr	227
(Inventor's signature)	(Date)
(Inventor's mailing address) <u>2788 San Ton</u>	nas Expressway, Santa Clara, CA 95051
(Printed legal name of inventor) Marco Sal	<u>ivi</u>
(Inventor's signature)	(Date)
(Inventor's mailing address) 2788 San Ton	nas Expressway, Santa Clara, CA 95051
NVIDIA Corporation Assignment Agreeme	nt Page 2 of 3

(Printed legal name of inventor) <u>Aaron El</u>	101 1.610331
(Inventor's signature)	(Date)
(Inventor's mailing address) <u>2788 San To</u>	mas Expressway, Santa Clara, CA 95051
(Printed legal name of inventor) Donald L	ec Brittain
(Inventor's signature)	(Date)
amment mailing address 5788 San To	mas Expressivay, Santa Clara, CA 95051

NVIDIA Corporation Assignment Agreement

Page 3 of 3

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∃ the United States □ another jurisdiction;
≅ enclosed herewith or □ previously filed on date 12/18/2019 under Serial No. 16/718,607
with docket number and title: 19-SV-0183-US03/512999; NEURAL NETWORK SYSTEM WITH TEMPORAL FEEDBACK FOR DENOISING OF RENDERED SEQUENCES.
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NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by me to have been received in full from NVIDIA:
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2. I hereby covenant and agree to cooperate with NVIDIA to enable NVIDIA to enjoy to the fullest extent the right, title and interest to the Inventions herein conveyed in any and all countries and groups of countries. My cooperation shall include prompt production of pertinent facts and documents, giving testimony, executing petitions, oaths, specifications, declarations or other papers, and providing other assistance to the extent deemed necessary or desirable by NVIDIA (a) for perfecting in NVIDIA the right, title and interest herein conveyed; (b) for prosecuting the Applications; (c) for filing and prosecuting substitute, conventional, divisional, continuation, continuation-in-part, or additional applications covering the Inventions; (d) for filing and prosecuting applications for reexamination or reissuance of any of the Patents; (e) in assisting NVIDIA in any pre-grant or post-grant proceeding involving any of the Inventions, Applications, or Patents; and (f) in assisting NVIDIA in any court or administrative proceeding involving any of the Inventions, Applications, or Patents, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, and infringement actions; provided, however, that reasonable expenses incurred by me in providing such cooperation shall be paid for by NVIDIA.
3. I hereby agree that the terms and covenants of this Assignment Agreement (the "Agreement") shall inure to the benefit of NVIDIA, its successors, assigns and other legal representatives, and shall be binding upon me, my beirs, my legal representatives, and my assigns.

NVIDIA Corporation Assignment Agreement

PATENT REEL: 051365 FRAME: 0230

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- 7. In the event that the filing date or application number of the Application is not entered at the time I execute this document, and if such information is deemed necessary. I hereby authorize NVIDIA, its successors and assigns, its legal representatives, or anyone it properly designates to enter above such filing date or application number.

(Printed legal name of inventor) Carl Jacob Munkberg					
(Inventor's signature)	(Date)				
(Inventor's mailing address) 2788 San Tomas Expressway, Santa Clara, CA 95051					
(Printed legal name of inventor) Jon Niklas Theodor Hasselgren					
(Inventor's signature)	(Date)				
(Inventor's mailing address) 2788 San Tomas Expressway, San	ita Clara, CA 95051				
(Printed legal name of inventor) Anjul Patney					
(Inventor's signature)	(Date) 12/10/2019				
(Inventor's mailing address) 2788 San Tomas Expressway, Santa Clara, CA 95051					
(Printed legal name of inventor) Marco Salvi					
(Inventor's signature)	(Date)				
(Inventor's mailing address) 2788 San Tomas Expressway, San	ta Clara, CA 95051				

NVIDIA Corporation Assignment Agreement

Page 2 of 3

(Primed legal name of inventor) <u>Aaron El</u>	iot Letohn	
(Inventor's signature)	(Date)	
(Inventor's mailing address) <u>2788 San To</u>	mas Expressway, Santa Clara, CA 95051	~~~
(Printed legal name of inventor) <u>Donald L</u>	ce Brittain	
(Inventor's signature)	(Date)	
(Inventor's mailing address) 2788 San Tol		

WHEREAS, I, an undersigned individual, have invented certain invention(s) described in an application for

Letters Patent (the "Applicat	ion") in:				
Ξ the United States	another jurisdiction		_;		
Ξ enclosed herewith o	r previously filed on date	12/18/2019	under Serial No.	16/718,607	_;
with docket number ar	nd title: 19-SV-0183-US03/5	512999; NEUR	AL NETWORK S	SYSTEM WITH	

TEMPORAL FEEDBACK FOR DENOISING OF RENDERED SEQUENCES.

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NVIDIA Corporation Assignment Agreement

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(Inventor's signature)		(Date)	
(Inventor's mailing address)	2788 San Tomas Expressy	vay, Santa Clara, CA 9505	
Printed legal name of inven	tor) Jon Niklas Theodor H.	asselgren	
Inventor's signature)			
Inventor's mailing address)	2788 San Tomas Expressy	vay, Santa Clara, CA 9505	<u>SI</u>
Printed legal name of inven	tor) Anjul Patney		***************************************
Inventor's signature)		(Date)	
Inventor's mailing address)	2788 San Tomas Expressy	way, Santa Clara, CA 950	51
Beinted local name of inven	tori Maron Salvi		
Printed legal name of inven	nore Lor,	, (Date) 12/	11612019
Inventor's mailing address)	2788 San Tomas Express	way, Santa Clara, CA 950	31
		en jaron en	
WADIA Corporation Accions	nant Agrasmant		Pone 7 of 3

PATENT REEL: 051365 FRAME: 0234

(Printed legal name of inventor) Aaron Eliot L	efohn	-
(Inventor's signature)	(Date)	
(Inventor's mailing address) 2788 San Tomas	Expressway, Santa Clara, CA 95051	
(Printed legal name of inventor) Donald Lee B	rittain	
(Inventor's signature)	(Date)	
(Inventor's mailing address) 2788 San Tomas I	Evnressway Santa Clara, CA 95051	

	IEREAS, I, an untertent (the "Applications)	ndersigned individual, have invarion") in:	vented certain i	invention(s) descri	bed in an applicati	ion for
part ()	ne United States	☐ another jurisdiction		_;		
Ξe	nclosed herewith	or □ previously filed on date	12/18/2019	under Serial No.	16/718,607	_°
		and title: 19-SV-0183-US03/3 BACK FOR DENOISING OF			YSTEM WITH	

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(Inventor's signature)	(Date)			
(Inventor's mailing address) 2788 San Tomas Expressway	, Santa Clara, CA 95051			
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(Printed legal name of inventor) Marco Salvi	····			
(Inventor's signature)	(Date)			
(Inventor's mailing address) 2788 San Tomas Expressway, Santa Clara, CA 95051				

(Printed legal name of	inventor) <u>A</u> a	aron Elioi E	etoini			
(Inventor's signature)		<u> </u>	<u> </u>	(Date)_	12/17/20	<u> </u>
(Inventor's mailing add	lress) <u>2788 (</u>	San Tomas	Expressway,	Santa Clara,	ČA 95051	
(Printed legal name of	inventor) <u>D</u> e	onald Lee B	rittain			 .
(Inventor's signature)				(Date)_		
(Inventor's mailing add	fress) 2788 (San Tomas	Evrressway	Santa Clara	CA 95051	

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Ξ enclosed herewith or \Box previously filed on date $\frac{12/18/2019}{\Box}$ under Serial No. $\frac{16/718,607}{\Box}$;
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NVIDIA Corporation Assignment Agreement

PATENT REEL: 051365 FRAME: 0239

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(Inventor's signature)	(Date)
	ias Expressway, Santa Clara, CA 95051
(Printed legal name of inventor) Jon Niklas	i Theodor Hasseigren
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