505994014 03/31/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6040724

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ILYA MINKIN	03/31/2020
RON DIAMANT	03/31/2020
KUN XU	03/31/2020

RECEIVING PARTY DATA

Name:	AMAZON TECHNOLOGIES, INC.
Street Address:	PO BOX 81226
City:	SEATTLE
State/Country:	WASHINGTON
Postal Code:	98108-1226

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16836493

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 097307-1176259 (138300US)	
NAME OF SUBMITTER:	MONICA NICK
SIGNATURE:	/Monica Nick/
DATE SIGNED:	03/31/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 6

source=2020-03-31_P69232-US01_097307-1176259_138300US_Assignment#page1.tif source=2020-03-31_P69232-US01_097307-1176259_138300US_Assignment#page2.tif source=2020-03-31_P69232-US01_097307-1176259_138300US_Assignment#page3.tif

PATENT 505994014 REEL: 052277 FRAME: 0572

U.S. Patent Appln. No. $\underline{16/836,493}$ Attorney Docket No. 097307-1176259 (138300US) Filing Date $\underline{\text{March 31, 2020}}$ Client Docket No. P69232-US01

PARTIES TO THE ASSIGNMENT

Assignor(s):

Ilya Minkin 410 Terry Avenue North Seattle, WA 98109-5210

Ron Diamant 410 Terry Avenue North Seattle, WA 98109-5210

Kun Xu 410 Terry Avenue North Seattle, WA 98109-5210

Assignee:

Amazon Technologies, Inc. PO Box 81226 Seattle, WA 98108-1226

AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled

"DIRECT MEMORY ACCESS OPERATION FOR NEURAL NETWORK ACCELERATOR" (Invention) for which a non-provisional application for United States Letters Patent (Application):

| was filed on _______ and accorded U.S. Application No. _______; or
| will be filed concurrently with the submission of this executed PATENT ASSIGNMENT for recordation.

ASSIGNOR(S) hereby authorizes and requests ASSIGNEE'S legal representatives, of Kilpatrick Townsend & Stockton LLP, associated with Customer No. 107508, to insert in the header above and here in parentheses (U.S. Patent Application No.16/836,493, filed March 31, 2020) this application's U.S. application number and filing date, when known.

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U.S. Patent Appln. No. 16/836,493

Attorney Docket No. 097307-1176259 (138300US)

Filing Date March 31, 2020

Client Docket No. P69232-US01

Title of Invention: DIRECT MEMORY ACCESS OPERATION FOR NEURAL NETWORK ACCELERATOR

Inventors: Ilya Minkin, Ron Diamant, Kun Xu

WHEREAS, ASSIGNEE, a corporation of the State of Nevada, is desirous of acquiring the

entire right, title and interest in and to the Invention and in and to any letters patent that may be

granted therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which

is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE its

successors and assigns, the entire right, title and interest in and to said Invention and any

improvements thereto, said Application and any and all letters patent which may be granted for

said Invention in the United States of America and its territorial possessions and in any and all

foreign countries, and in any and all provisional, divisions, reissues, re-examinations and

continuations thereof, including the right to file foreign applications directly in the name of

ASSIGNEE and to claim priority rights deriving from said Application to which said foreign

applications are entitled by virtue of international convention, treaty or otherwise, said Invention,

Application and all letters patent on said Invention to be held and enjoyed by ASSIGNEE and its

successors and assigns for their use and benefit and of their successors and assigns as fully and

entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment,

transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner

of Patents and Trademarks, as well as all other applicable patent offices throughout the world, to

issue all letters patent on said Invention to ASSIGNEE. ASSIGNOR(S) agree to execute all

instruments and documents required for the making and prosecution of applications for United

States and foreign letters patent on said Invention, for litigation regarding said letters patent, or

for the purpose of protecting title to said Invention or letters patent therefor.

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U.S. Patent Appln. No. 16/836,493

Attorney Docket No. 097307-1176259 (138300US)

Filing Date March 31, 2020

Client Docket No. P69232-US01

Title of Invention: DIRECT MEMORY ACCESS OPERATION FOR NEURAL NETWORK ACCELERATOR

Inventors: Ilya Minkin, Ron Diamant, Kun Xu

AND ASSIGNOR(S) DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its

successors, legal representatives, and assigns all claims for damages and all remedies arising out

of any violation of the rights assigned hereby that may have accrued prior to the date of

assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue

for, collect, and retain damages for past infringements of said letters patent before or after

issuance.

AND ASSIGNOR(S) DOES HEREBY covenant and agree that ASSIGNOR(S) will communicate

to ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR

respecting the Invention or said Application, and testify in any legal proceeding, assist in the

preparation of any other patent property relating to the Application and the Invention or any

improvements made thereto, sign/execute all lawful papers, provide all requested documents,

execute and make all rightful oaths and/or declarations in connection with the Application and

the Invention including any improvements made thereto, any patent applications filed therefrom,

and any continuing application filed from any of the aforementioned applications, and generally

do everything possible to aid ASSIGNEE, its successors, legal representatives and assigns, to obtain

and enforce proper patent protection for the Invention in all countries. These provisions are

binding upon ASSIGNOR's heirs, legal representatives, administrators, and assigns.

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U.S. Patent Appln. No.	16/836,493	Attorney Docket No. 097307-1176259 (138300US)
Filing Date March 31,	2020	Client Docket No. P69232-US01
Title of Invention: DIRE	ECT MEMORY ACCESS	OPERATION FOR NEURAL NETWORK ACCELERATOR
Inventors: Ilya Minkin,	Ron Diamant, Kun Xu	ı
<u>DECLARATION</u> As a below named inve	entor, I hereby declare	e that:
This declaration is dire	cted to:	
igtimes the attache	ed application; or	
United Stat	tes Patent Application	n number filed on; or
PCT Interna	ational Application nu	ımber filed on
The above-identified a	pplication was made c	or authorized to be made by me.
I believe that I am the application.	original inventor or an	n original joint inventor of a claimed Invention in the
I have reviewed and ur	nderstand the content	ts of the above-identified application, and
acknowledge the duty	to disclose to the US F	Patent & Trademark Office all information known to
me to be material to th	ne patentability as def	fined in 37 CFR 1.56.
_	•	statement made in this declaration is punishable to of not more than five (5) years, or both.
Docusigned by: // // // // // // // // // // // // //		
March 31, 2020		
Date		

U.S. Patent Appln. No. $\frac{16/836,493}{}$	Attorney Docket No. 097307-1176259 (138300US)				
Filing Date March 31, 2020	Date March 31, 2020 Client Docket No. P69232-US0				
Title of Invention: DIRECT MEMORY ACC	ESS OPERATION FOR NEURAL NETWORK ACCELERATOR				
Inventors: Ilya Minkin, Ron Diamant, Kun	Xu				
<u>DECLARATION</u> As a below named inventor, I hereby declaration	are that:				
This declaration is directed to:					
igstyle the attached application; or					
United States Patent Application	on number; or				
PCT International Application	number filed on				
The above-identified application was made	e 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.					
I have reviewed and understand the conte	nts of the above-identified application, and acknowledge				
the duty to disclose to the US Patent & Tra	demark Office all information known to me to be				
material to the patentability as defined in	37 CFR 1.56.				
I hereby acknowledge that any willful false	statement made in this declaration is punishable under				
18 USC 1001 by fine or imprisonment of no	ot more than five (5) years, or both.				
Ron Diamant					
March 31, 2020					
Date					

U.S. Patent Appln. No	Attorney Do	cket No. 097307-117	76259 (138300US)	
Filing Date March 31, 2020	Client Docket No. P69232-US01			
Title of Invention: DIRECT MEMORY ACCE	ESS OPERATION FO	OR NEURAL NETWOR	K ACCELERATOR	
Inventors: Ilya Minkin, Ron Diamant, Kun	Xu			
DECLARATION As a below named inventor, I hereby decla	nre that:			
This declaration is directed to:				
the attached application; or				
United States Patent Application	on number	filed on	; or	
PCT International Application r	number	filed on	manus.*	
The above-identified application was made	e or authorized to	be made by me.		
I believe that I am the original inventor or	an original joint in	ventor of a claimed In	vention in the	
application.				
I have reviewed and understand the conte	nts of the above-io	dentified application,	and acknowledge	
the duty to disclose to the US Patent & Tra	idemark Office all i	nformation known to	me to be	
material to the patentability as defined in	37 CFR 1.56.			
I hereby acknowledge that any willful false			ounishable under	
18 USC 1001 by fine or imprisonment of no	ot more than five (5) years, or both.		
DocuSigned by:				
/tzwx Xw				
Kun Xu				
March 31, 2020				
Date				

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