#### 505260976 01/03/2019

### PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
BITA DARVISH ROUHANI	12/13/2018
TAESIK NA	12/14/2018
ERIC S. CHUNG	12/14/2018
DANEIL LO	12/13/2018
DOUGLAS C. BURGER	12/17/2018

#### RECEIVING PARTY DATA

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#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16223603

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NAME OF SUBMITTER:	KARL G. MEIER
SIGNATURE:	/Karl G. Meier/
DATE SIGNED:	01/03/2019
	<u> </u>

**Total Attachments: 10** 

**PATENT** REEL: 047893 FRAME: 0484

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C	legal representa Microsoft Way, REPRESENTATIV and given Appli United States Pa	atives, of Microsoft To Redmond, Washingto (ES) to insert here in p cation No.	orizes, and requests, ASS echnology Licensing, LLC in 98052 (ASSIGNEE'S LEC parentheses (filed on by the following Office: Office) this APPLICATION ce, when known;	, One JAL
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behalf of itse desirous of a right of prior patents deriv for the Unite DERIVATIVES ASSIG to insert the	elf and its successon acquiring, the entire rity, in the INVENTI wed therefrom, such d States, its territo 5"));	rs and assigns ("ASSI e and exclusive rights ON and the APPLICAT n as continuing applic ries, and all foreign c rizes, and requests, A ling date, and Office	ngton limited liability cor GNEE"), is entitled to, and s, title and interest, inclu- TON (and all other applic cations, in whole or in pa countries ("APPLICATION SSIGNEE'S LEGAL REPRES into the following table fo	d is ding the ations and art,in and ENTATIVES
Application	No.	Filing Date	Office	

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to

ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of the APPLICATION (and APPLICATION DERIVATIVES), for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION (and APPLICATION DERIVATIVES).

& Bila Darvish Rouhani	12/13/2018
Inventor's Signature	Date
Bita Darvish Rouhani	چینا درو بیش رومانی
Printed Name in English	Printed Name In Native Language (if
	other than English)

I, Taesik Na ("ASSIGNOR") of subject matter ("INVENTION") entitled "TRAINING NEURAL NET' FORMATS" ("APPLICATION"), which	disclosed and/or claimed WORK ACCELERATORS USI	• • •
legal representa Microsoft Way, R REPRESENTATIVE and given Applic United States Pa	tives, of Microsoft Techno Ledmond, Washington 980	2)52 (ASSIGNEE'S LEGAL theses (filed on, ne following Office:  e) this APPLICATION's
	and was given App fice "United States Patent a	olication No by and Trademark Office";
Microsoft Technology Lice behalf of itself and its successor desirous of acquiring, the entire right of priority, in the INVENTIC patents derived therefrom, such for the United States, its territorial DERIVATIVES"));	s and assigns ("ASSIGNEE" and exclusive rights, title IN and the APPLICATION (a as continuing application	and interest, including the and all other applications and s, in whole or in part,in and
ASSIGNOR hereby authori to insert the Application No., fili	<u>.                                      </u>	IEE'S LEGAL REPRESENTATIVES ne following table for any
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Application No.	Filing Date	Office

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Tassik Na	12/14/2018
Inventor's Signature	Date
Taesik Na Printed Name in English	Printed Name in Native Language (if other than English)

I, Eric S. Chung ("ASSIGNO inventor of subject matter ("INVE application entitled "TRAINING NOTALE PRECISION DATA FORMATS" ("AP	EURAL NETWORK ACCELE	claimed in a patent
legal representa Microsoft Way, R REPRESENTATIVE and given Applic United States Pa	tives, of Microsoft Techno edmond, Washington 980	52 (ASSIGNEE'S LEGAL heses (filed on, e following Office:  2) this APPLICATION's
	and was given App	·
Microsoft Technology Lice behalf of itself and its successor desirous of acquiring, the entire right of priority, in the INVENTIC patents derived therefrom, such for the United States, its territori DERIVATIVES"));	s and assigns ("ASSIGNEE" and exclusive rights, title IN and the APPLICATION (a as continuing applications	and interest, including the and all other applications and s, in whole or in part,in and
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Inventor's Signature

Eric S. Chung
Printed Name in English

Printed Name in Native Language (if

other than English)

of subject matter ("INVI	ilGNOR"), am the original in ENTION") disclosed and/or o RAL NETWORK ACCELERATO DN"), which:	laimed in a patent applica	ation
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1111	(2/13/18
Inventor's Signature	Date
Daniel Lo	
Printed Name in English	Printed Name in Native Language (if
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I, Douglas C. Burger ("ASS inventor of subject matter ("INVI application entitled "TRAINING N PRECISION DATA FORMATS" ("AI	ENTION") disclosed and/or IEURAL NETWORK ACCELE	•
legal representa Microsoft Way, I REPRESENTATIV and given Appli United States Pa	tives, of Microsoft Techno Redmond, Washington 980	052 (ASSIGNEE'S LEGAL theses (filed on, ne following Office:  e) this APPLICATION's
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Inventor's Signature

Douglas C. Burger

Printed Name in English

Printed Name in Native Language (if

other than English)

PATENT REEL: 047893 FRAME: 0495

RECORDED: 01/03/2019