#### 507009947 12/06/2021

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7056781

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
BIN ZHU	04/03/2020
HAIDONG ZHANG	12/23/2019
YUANYUAN TANG	07/22/2019
HE HUANG	07/16/2019
SONG GE	01/08/2020
DONGMEI ZHANG	01/07/2020

#### **RECEIVING PARTY DATA**

Name:	MICROSOFT TECHNOLOGY LICENSING, LLC
Street Address:	ONE MICROSOFT WAY
City:	REDMOND
State/Country:	WASHINGTON
Postal Code:	98052

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

Property Type	Number	
Application Number:	17615087	

#### **CORRESPONDENCE DATA**

Fax Number:

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.

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Correspondent Name: SCHWEGMAN LUNDBERG & WOESSNER, P.A.

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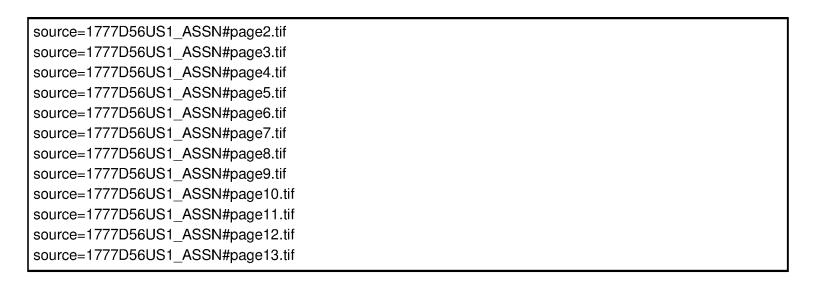
ATTORNEY DOCKET NUMBER:	406875-US-PCT/1777.D56US1
NAME OF SUBMITTER:	TYLYN MOORE
SIGNATURE:	/tylyn moore/
DATE SIGNED:	12/06/2021

**Total Attachments: 13** 

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PATENT REEL: 058304 FRAME: 0464

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PATENT REEL: 058304 FRAME: 0465

# RECORDATION FORM COVER SHEET PATENTS ONLY

Attv Ref/Docket No.: 406875-US-PCT (1777.D56US1) Patent and Trademark Office To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. Name and address of receiving party(ies): 1. Name of conveying party(ies): Name: Microsoft Technology Licensing, LLC Bin Zhu, Haidong Zhang, Yuanyuan Tang, He Huang, Song Ge, Dongmei ZHĂNG Street Address: One Microsoft Way City: Redmond State: WA Zip Country: United States of America Additional name(s) of conveying party(ies) attached? Zip: 98052 [ ]Yes [X]No Additional name(s) & address(es) attached? []Yes 3. Nature of conveyance: [X]No [X] Assignment [ ] Merger [ ] Security Agreement [ ] Change of Name [ ] Other Execution Date: <u>April 3, 2020, December 23, 2019, July 22, 2019, July 16, 2019, January 8, 2020, January 7,</u> 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) Serial No. 17/615,087 Additional numbers attached? [ ]Yes [X]No 6. Total number of applications and patents involved: 1 5. Name and address of party to whom correspondence 7. Total fee (37 CFR 3.41):\$ 0.00 concerning document should be mailed: Name: Andrew R. Peret ∏Enclosed [Authorized to be charged to deposit account Address: 19-0743 Schwegman Lundberg & Woessner, P.A. P.O. Box 2938 8. Please charge any additional fees or credit any over Minneapolis, Minnesota 55402 payments to our Deposit Account No.: 19-0743 DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. 1 andrew Peret 1 Andrew R. Peret/Reg. No. 41,246 Name of Person Signing Total number of pages including cover sheet: 13 Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks Mail Stop Assignment Recordation Services

P.O. Box 1450

Alexandria, VA 22313-1450

PATENT REEL: 058304 FRAME: 0466

## PATENT ASSIGNMENTMS Docket No.: 406875-CN-NP

I Bin ZHU("ASSIGNOR") an subject matter ("INVENTION") dis	sclosed and/or claimed i	• • •
ASSIGNEE'S legal r LLC, One Microsoft LEGAL REPRESENT/ on No. Office	ASSIGNOR hereby auth epresentative, Microsoft Way, Redmond, Washing ATIVES), to insert here and by ng date, and Office, whe	Technology Licensing, pton 98052 (ASSIGNEE'S in parentheses (filed given Application the following this APPLICATION's
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Microsoft Technology Lice behalf of itself and its success desirous of acquiring, the entire right of priority, in the INVENTIO patents derived therefrom, such for the United States, its te DERIVATIVES"));	sors and assigns ("ASSIC and exclusive rights, ti N and the APPLICATION as continuing applicatio	tle and interest, including the (and all other applications and ns, in whole or in part, in and
ASSIGNOR hereby as REPRESENTATIVES to insert the following table for any APPLICAT	e Application No., filin	g date, and Office into the
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For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

B53e	April 3, 2020
Inventor's Signature	Date
Bin ZHU	朱斌
Printed Name in English	Printed Name in Native Language  (if other than English)

inventor of subject matter	("INVENTION") disclosed	inventor or an original join and/or claimed in a paten <u>N IN IMAGES</u> " ("APPLICATION")
$\square$ will be filed.	ASSIGNOR hereby auth	norizes, and requests,
LLC, One Micros LEGAL REPRESE on No. Office	I representative, Microsoft oft Way, Redmond, Washing NTATIVES), to insert here and by	gton 98052 (ASSIGNEE'S in parentheses (filed given Application the following ) this APPLICATION's
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behalf of itself and its succ desirous of acquiring, the en right of priority, in the INVEN- patents derived therefrom, su	essors and assigns ("ASSI tire and exclusive rights, t FION and the APPLICATION Ich as continuing application	on limited liability company, or GNEE"), is entitled to, and is itle and interest, including the (and all other applications and ons, in whole or in part, in and ign countries ("APPLICATION
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PATENT AS	SIGNMENTMS Docket No.:	406875-CN-NP
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Haidan thank	Dec. 23	,2019
Inventor's Signature	Date	
Haidong ZHANG	张海东	
Printed Name in English	Printed Name in Native Language (if other than English)	

PATENT ASSIGNMENT	MS Docket No.: 406875-CN-NP
inventor of subject matter ("INVENT	am the original inventor or an original join in a pater and extraction in IMAGES "("APPLICATION")
☐ will be filed. ASSIGN	OR hereby authorizes, and requests,
LLC, One Microsoft Way,  LEGAL REPRESENTATIVES  on  No.  Office	ntative, Microsoft Technology Licensing, Redmond, Washington 98052 (ASSIGNEE'S ), to insert here in parentheses (filedand given Applicationby the following) this APPLICATION's te, and Office, when known;
was filed on June 30, 201	<u>9</u> and was given Application No
	ollowing Office " <u>State Intellectual Property</u> public of China
behalf of itself and its successors a desirous of acquiring, the entire and right of priority, in the INVENTION and patents derived therefrom, such as co	LLC, a Washington limited liability company, on assigns ("ASSIGNEE"), is entitled to, and exclusive rights, title and interest, including the the APPLICATION (and all other applications and intimuling applications, in whole or in part, in an es, and all foreign countries ("APPLICATIO
ASSIGNOR hereby authoric REPRESENTATIVES to insert the App following table for any APPLICATION D	lication No., filing date, and Office into th
Application No. Filing	Date Office

Page 1 of 2

	PATENT ASSIGN	MENTMS Docket No.:	406875-CN-NP
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Ynonynon TANG	07.22.2019
Inventor's Signature	Date
Yuanyuan TANG	汤缓缓
Printed Name in English	Printed Name in Native Language
	(if other than English)

subject mat	ter ("INVENTION") (	· <del>-</del>	or an original joint inventor o in a patent application entitled ICATION"), which:
	ASSIGNEE'S legal LLC, One Microso LEGAL REPRESEN and given Applic Office	ASSIGNOR hereby auth representative, Microsoft oft Way, Redmond, Washing TATIVES), to insert here is ation No.	t Technology Licensing, gton 98052 (ASSIGNEE'S in parentheses (filed on by the following) this APPLICATION's
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PATENT ASSIGNMENTMS Docket No.:

406875-CN-NP

Page 1 of 2

Ho Huana	2019-07-16
Inventor's Signature	Date
He HUANG	黄河
Printed Name in English	Printed Name in Native Language
	(if other than English)

I Song GE("ASSIGNOR") a subject matter ("INVENTION") d "DATA EMBEDDING AND EXTRA	isclosed and/or claimed i	
ASSIGNEE'S legal LLC, One Microsof LEGAL REPRESENT on No. Office	ASSIGNOR hereby auth representative, Microsoft ft Way, Redmond, Washing TATIVES), to insert here and by	Technology Licensing, gton 98052 (ASSIGNEE'S in parentheses (filed given Application the following ) this APPLICATION's
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Microsoft Technology Lice behalf of itself and its success desirous of acquiring, the entire right of priority, in the INVENTI patents derived therefrom, successfor the United States, its to DERIVATIVES"));	ssors and assigns ("ASSI re and exclusive rights, ti ON and the APPLICATION h as continuing application	itle and interest, including the (and all other applications and ons, in whole or in part, in and
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Application No.	Filing Date	Office

PATENT ASSIGNMENTMS Docket No.:	406875-CN-NP

Sory Gre	1. 8 (2020
Inventor's Signature	Date
Song GE	<b>之</b> 颂
Printed Name in English	Printed Name in Native Language (if other than English)

### PATENT ASSIGNMENTMS Docket No.: 406875-CN-NP

I Dongmei ZHANG("ASS inventor of subject matter (		inventor or an original join
application entitled " <u>DATA EMB</u> which:		·
☐ will be filed.	ASSIGNOR hereby auth	orizes, and requests,
LLC, One Microsol LEGAL REPRESEN' on No. Office	representative, Microsoft ft Way, Redmond, Washing FATIVES), to insert here and by ling date, and Office, whe	gton 98052 (ASSIGNEE'S in parentheses (filed given Application the following ) this APPLICATION's
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Page 1 of 2

PATENT ASSIGNMENTMS Docket No.: 406875-CN-NP

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

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).

Noneman Hone	*
0 1 0 0	Jan 7, 2020
Inventor's Signature	Date
Dongmei ZHANG	张冬梅
Printed Name in English	Printed Name in Native Language
	(if other than English)

RECORDED: 12/06/2021