507556750 10/21/2022

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7603639

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SIMING TIAN	06/08/2020
XIN ZHANG	06/08/2020
YI ZENG	06/08/2020
YANG YANG	06/09/2020
DAXIN JIANG	05/29/2020

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:	17920215

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.

Email: usdocket1@microsoft.com

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

Address Line 1: P.O. BOX 2938

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	408384-US-PCT/1777.E92US1
NAME OF SUBMITTER:	TYLYN MOORE
SIGNATURE:	/tylyn moore/
DATE SIGNED:	10/21/2022

Total Attachments: 11

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PATENT REEL: 061498 FRAME: 0571

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RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: 408384-US-PCT (1777.E92US1) Patent and Trademark Office To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): Name: Microsoft Technology Licensing, LLC Siming Tian, Xin Zhang, Yi Zeng, Yang Yang, Daxin Street Address: One Microsoft Way Jiang City: <u>Redmond</u> State: <u>WA</u> Zip Country: <u>United States of America</u> 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: June 8, 2020, June 8, 2020, June 8, 2020, June 9, 2020, May 29, 2020 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. 17/920,215 Additional numbers attached? []Yes [X]No 6. Total number of applications and patents involved: 1 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41):\$ 0.00 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 payments to our Deposit Account No.: 19-0743 Minneapolis, Minnesota 55402 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 Oct 21, 2022 Andrew R. Peret/Reg. No. 41,246 Name of Person Signing Signature Date

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 Total number of pages including cover sheet: 11

I <u>Siming TIAN</u> ("ASSIGNITY OF SUBJECT MATTER (application entitled " <u>QUELANGUAGES</u> " ("APPLICATION	"INVENTION") disclosed a RY CONVERSION FOR			
ASSIGNEE'S leg Licensing, LLC, 98052 (ASSIGNE parentheses (file No. Office	ASSIGNOR hereby authorgal representative, Mi One Microsoft Way, Re E'S LEGAL REPRESENTATIV d on by	crosoft Technology edmond, Washington (ES), to insert here in and given Application the following) this APPLICATION's		
No	and was give by the following ";			
Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the 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 hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the				
following table for any APPLICATION DERIVATIVES after they are known;				
Application No.	Filing Date	Office		
	1	1		

Page 1 of 2

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"));

VPD 192	6/8 /2020
Inventor's Signature	Date
Siming TIAN	田思明
Printed Name in English	Printed Name in Native Language
	(if other than English)

I Xin ZHANG ("ASSIGNOR") am the original inventor or an original joint

<u> -</u>	ERY CONVERSION FOR	and/or claimed in a patent <u>DIFFERENT GRAPH QUERY</u>
ASSIGNEE'S I Licensing, LLC 98052 (ASSIGN parentheses (fi No. Office	ASSIGNOR hereby authegal representative, M., One Microsoft Way, IEE'S LEGAL REPRESENTATION by s, filing date, and Office, w	Microsoft Technology Redmond, Washington IVES), to insert here in and given Application the following _) this APPLICATION's
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	by the followin	•
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the right of priority, in the applications and patents downlook or in part, in and countries ("APPLICATION DEFENSION ASSIGNOR hereby REPRESENTATIVES to insert	ne INVENTION and the erived therefrom, such a for the United States, its RIVATIVES")); authorizes, and require the Application No., filing	title and interest, including APPLICATION (and all other s continuing applications, in territories, and all foreign uests, ASSIGNEE'S LEGAL ag date, and Office into the they are known;
Application No.	Filing Date	Office
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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"));

列化 The Inventor's Signature	6/8/2020 Date
Xin ZHANG	张鑫
Printed Name in English	Printed Name in Native Language (if other than English)

I <u>Yi ZENG</u> ("ASSIGNOR") of subject matter ("INVENTION entitled " <u>QUERY CONVERSION</u> "), which:	l") disclosed and/or clain	•	
ASSIGNEE'S leg Licensing, LLC, 98052 (ASSIGNEE parentheses (filed No. Office	ASSIGNOR hereby authoral representative, Micosoft Way, ReC'S LEGAL REPRESENTATIVE on aby	crosoft Technology dmond, Washington ES), to insert here in and given Application the following this APPLICATION's	
No	and was give by the following (";		
Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the 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 hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the			
following table for any APPLICA			
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 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"));

官益	2020.06,08
nventor's Signature	Date
YI ZENG	曾治
Printed Name in English	Printed Name in Native Language
	(if other than English)
	(ii other than English)

PATENT ASSIGNMENT MS I	Docket No.:	408384-CN-NI
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inventor of application	subject matter ("	'INVENTION") disclosed a RY CONVERSION FOR	nventor or an original joint nd/or claimed in a patent DIFFERENT GRAPH QUERY
	ASSIGNEE'S leg Licensing, LLC, 98052 (ASSIGNEE parentheses (filed No. Office	ASSIGNOR hereby authoral representative, Microsoft Way, Ree's LEGAL REPRESENTATIVE on	crosoft Technology Edmond, Washington (ES), to insert here in and given Application the following (this APPLICATION's
	No	and was give by the following	
on behalf of desirous of a the right of applications whole or in	itself and its succ acquiring, the ent priority, in the and patents deri	essors and assigns ("ASSII ire and exclusive rights, INVENTION and the Al ved therefrom, such as the United States, its	on limited liability company, GNEE"), is entitled to, and is title and interest, including PLICATION (and all other continuing applications, in territories, and all foreign
	TIVES to insert th		ests, ASSIGNEE'S LEGAL date, and Office into the hey are known:
Application N		Filing Date	Office

Page 1 of 2

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"));

杨阳	6/9/2020
Inventor's Signature	Date
Yang YANG	杨旸
Printed Name in English	Printed Name in Native Language
	(if other than English)

	PAIL	ENT ASSIGNM	ENI MS	Docket No.:	408384-CN-NF
inventor of application	axin_JIANG_ ("ASSI subject matter entitled " <u>QUE</u> 5_" ("APPLICATION	("INVENTION") ERY CONVERSI	disclosed	and/or claim	ed in a patent
	will be filed. ASSIGNEE'S legal LLC, One Microso LEGAL REPRESEN on No. Office Application No.,	representative oft Way, Redmo ITATIVES), to	, Microsoft nd, Washin insert here and by	t Technology gton 98052 (A e in parenthe given A the) this APPLI	Licensing, SSIGNEE'S ses (filed pplication following
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behalf of it desirous of right of prio patents deri	esoft Technology Liself and its successed acquiring, the entority, in the INVENT wed therefrom, such ited States, its	essors and assivers and exclusivers and exclusivers and the AP and the AP as continuing	igns ("ASSI /e rights, t PLICATION g applicatio	GNEE"), is ent itle and interes (and all other ons, in whole o	itled to, and is st, including the applications and or in part, in and
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Page 1 of 2

PATENT ASSIGNI	MENI MS	Docket No.:	408384-CN-IN

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"));

Danin 3	2020.5.29
Inventor's Signature	Date
Daxin JIANG	姜大昕
Printed Name in English	Printed Name in Native Language
	(if other than English)