PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5679269

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DIMITRIOS BASILE DIMITRIADIS	08/20/2019
XIE CHEN	08/20/2019
NANSHAN ZENG	08/16/2019
YU SHI	08/20/2018
LIYANG LU	08/20/2019

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:	16546715

CORRESPONDENCE DATA

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Correspondent Name: MICROSOFT TECHNOLOGY LICENSING, LLC

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Address Line 4: REDMOND, WASHINGTON 98052

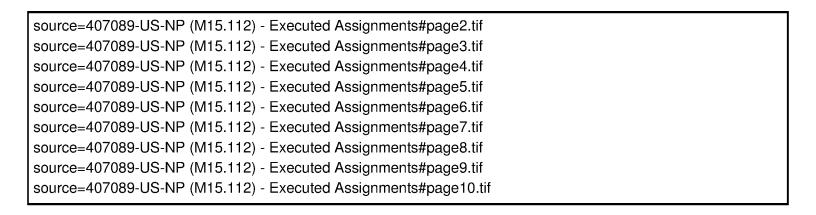
ATTORNEY DOCKET NUMBER:	407089-US-NP (M15.112)
NAME OF SUBMITTER:	PATRICK J. BUCKLEY
SIGNATURE:	/PJB/
DATE SIGNED:	08/21/2019

Total Attachments: 10

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PATENT REEL: 050117 FRAME: 0501

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PATENT ASSIGNMENT MS Docket No.: 407089-US-NP I Dimitrios Basile DIMITRIADIS ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "DATA-DRIVEN AND RULE-BASED SPEECH RECOGNITION OUTPUT **ENHANCEMENT**" ("APPLICATION"), which: will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representative, Microsoft Technology Licensing, LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on August 21, 2019 and given Application No. 16/546,715 by the following Office US - United States Patent and Trademark Office) this APPLICATION's Application No., filing date, and Office, when known; was filed on _____ and was given Application No ______ by the following Office 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

Page 1 of 2

MS Docket No.: 407089-US-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).

Dimitrios B. Dimitriadis	
Dimurios D. Dimuriadis	08/20/2019
Inventor's Signature	Date
Dimitrios Basile DIMITRIADIS	
Printed Name in English	Printed Name in Native Language
	(if other than English)

MS Docket No.:	407089-US-NP

I <u>Xie CHEN</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>DATA-DRIVEN AND RULE-BASED SPEECH RECOGNITION OUTPUT ENHANCEMENT</u>" ("APPLICATION"), which:

\boxtimes	will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S
	legal representative, Microsoft Technology Licensing, LLC, One
	Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL
	REPRESENTATIVES), to insert here in parentheses (filed on August 21,
	2019 and given Application No. 16/546,715 by the following Office
	US - United States Patent and Trademark Office) this APPLICATION's
	Application No., filing date, and Office, when known;

was filed on	and was given Application
No	by the following Office
	". 1

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"));

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Page 1 of 2

MS Docket No.: 407089-US-NP

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tie chen	8/20/2019	
Inventor's Signature	Date	
Xie CHEN	·····································	
Printed Name in English	Printed Name in Native Language	
	(if other than English)	

PAIENIA	ASSIGNMEN I	MS Docket No.: <u>40/089-US-NP</u>
I <u>Nanshan ZENG</u> ("ASSIGN of subject matter ("INVENTION") " <u>DATA-DRIVEN AND RULE-BA</u>	disclosed and/or claimed	, , ,
("APPLICATION"), which:		
legal representati Microsoft Way, R REPRESENTATIVES) 2019 and given A <u>US – United States</u> Application No., fil	SNOR hereby authorizes, a ve, Microsoft Technolog edmond, Washington 980, to insert here in parenthe pplication No. 16/546,715 Patent and Trademark Of ling date, and Office, when	y Licensing, LLC, One D52 (ASSIGNEE'S LEGAL eses (filed on <u>August 21, 5</u> by the following Office fice) this APPLICATION's known;
	and was given A	Application
	by the following Office ".	
	", ,	
Microsoft Technology Lid behalf of itself and its successor of acquiring, the entire and ex priority, in the INVENTION and derived therefrom, such as cor United States, its territories, and	rs and assigns ("ASSIGNEE" cclusive rights, title and i the APPLICATION (and all itinuing applications, in w	nterest, including the right of other applications and patents hole or in part, in and for the
ASSIGNOR hereby author to insert the Application No.,	•	NEE'S LEGAL REPRESENTATIVES to the following table for any
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Page 1 of 2

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| S/16/20/9 | Date |
| Nanshan ZENG | Printed Name in English | Printed Name in Native Language (if other than English)

MS Docket No.: 407089-US-NP

PATENT ASSIGNMENT MS Docket No.: 407089-US-NP

I <u>Yu SHI</u> ("ASSIGNOR") am t	he original inventor or an c	original joint inventor of subject
matter ("INVENTION") disclosed	and/or claimed in a pate	nt application entitled "DATA-
DRIVEN AND RULE-BASED	SPEECH RECOGNITION	
("APPLICATION"), which:		
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legal representativ Microsoft Way, Re REPRESENTATIVES) <u>2019</u> and given Ap <u>US – United States</u>	iNOR hereby authorizes, and we, Microsoft Technology admond, Washington 980, to insert here in parenthe oplication No. 16/546,715 Patent and Trademark Offing date, and Office, when	Licensing, LLC, One 152 (ASSIGNEE'S LEGAL 158 (filed on August 21, by the following Office 156) this APPLICATION's
	and was given A by the following Office ";	pplication
Microsoft Technology Lic behalf of itself and its successor of acquiring, the entire and ex priority, in the INVENTION and derived therefrom, such as con United States, its territories, and	s and assigns ("ASSIGNEE"; clusive rights, title and in the APPLICATION (and all tinuing applications, in w	nterest, including the right of other applications and patents hole or in part, in and for the
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Inventor's Signature	8/20/2019 Date	
Yu SHI	海古净	
Printed Name in English	Printed Name in Native Language (if other than English)	

MS Docket No.: 407089-US-NP

PATENT ASSIGNMENT MS Docket No.: 407089-US-NP I Liyang LU ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "DATA-DRIVEN AND RULE-BASED SPEECH RECOGNITION OUTPUT ENHANCEMENT" ("APPLICATION"), which: oxtimes will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representative, Microsoft Technology Licensing, LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on August 21. 2019 and given Application No. 16/546,715 by the following Office US - United States Patent and Trademark Office) this APPLICATION's Application No., filing date, and Office, when known; was filed on _____ and was given Application No ______ by the following Office 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

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lyggh	8/20/2019
Inventor's Signature	Date
Liyang LU	陆李阳
Printed Name in English	Printed Name in Native Language
	(if other than English)