10/13/2017 504594160

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4640872

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BIN GAO	10/13/2017
RUOFEI ZHANG	10/13/2017
MU-CHU LEE	10/13/2017

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15784057

CORRESPONDENCE DATA

Fax Number: (425)936-7329

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.

Phone: 425-707-9382

Email: USDocket@microsoft.com CHRISTOPHER OCHS **Correspondent Name:** Address Line 1: ONE MICROSOFT WAY

Address Line 2: PATENT GROUP DOCKETING DEPT Address Line 4: **REDMOND, WASHINGTON 98052**

ATTORNEY DOCKET NUMBER:	403089-US-NP
NAME OF SUBMITTER:	DAVID HUNTLEY
SIGNATURE:	/ David Huntley 40309 /
DATE SIGNED:	10/13/2017

Total Attachments: 6

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PATENT REEL: 043866 FRAME: 0182 504594160

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> PATENT REEL: 043866 FRAME: 0183

			an original joint inventor of
<u>.</u> .			a patent application entitled <u>d Matching</u> " ("APPLICATION"),
vanig a veri which:	<u> </u>	<u> </u>	64. 10.00(A) 111.1(A) (1.58 2 P1.P. 1.5 1.5 1.7) A 36
\boxtimes	will be filed.	ASSIGNOR hereby autho	rizes, and requests,
	ASSIGNEE'S legal i	epresentative, Microsoft	Technology Licensing,
	LLC, One Microsoft	Way, Redmond, Washingt	on 98052 (ASSIGNEE'S
		ATIVES), to insert here	· ·
		and given Application	
		ffice USPTO	
	APPLICATION'S App	olication No., filing date, ar	nd Office, when known;
	was filed on	and was given App	lication
		by the following Office $^{"}$	
behalf of itse of acquiring, priority, in th derived then United States ASSIG	If and its successors, the entire and exc the entire and exc ne INVENTION and t efrom, such as cont s, its territories, and NOR hereby authori	s and assigns ("ASSIGNEE"), clusive rights, title and in he APPLICATION (and all o tinuing applications, in wh I all foreign countries ("API zes, and requests, ASSIGN	limited liability company, on is entitled to, and is desirous terest, including the right of ther applications and patents ole or in part, in and for the PLICATION DERIVATIVES")); EE'S LEGAL REPRESENTATIVES the following table for any
APPLICATION	N DERIVATIVES after	they are known;	
Application		Filing Date	Office
2		2	•

MS Docket No.: 403089-US-NP

MS Docket No.: 403089-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).

Bu Gu	10/13/2017
Inventor's Signature	Date
Bin GAO	高州
Printed Name in English	Printed Name in Native Language
	(if other than English)

I <u>Ruofei ZHANG</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>Using a Generative Adversarial Network for Query-Keyword Matching</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 $\frac{\text{October }13,2017}{\text{and given Application No.}}$ and $\frac{15784057}{\text{by}}$
	the following Office USPTO
	APPLICATION's Application No., filing date, and Office, when known;
	was filed on and was given Application
	Noby 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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MS Docket No.: 403089-US-NP

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Ruste: Thoug	10/13/2017
Inventor's Signature Ruofei ZHANG	Date
Printed Name in English	Printed Name in Native Language (if other than English)

MS Docket No.: 403089-US-NP

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\boxtimes	will be	filed.	ASSIGNOR	hereby	authori	zes, an	d req	uests
	ASSIGNE	EE'S legal	representat	ive, Micr	osoft Te	chnolog	gy Licei	nsing,
	LLC, On	e Microsc	oft Way, Redn	nond, Wa	ıshingtoı	n 98052	(ASSIG	NEE'S
	LEGAL	REPRESEN	ITATIVES), to	o insert	here in	parent	theses	(filed
	on Octo	ber 13, 2017	and giv	en Appli	cation N	o. <u>157840</u>	57	by
	the fol	lowing	Office	OT		**************************************)	this
			pplication No					
	was filed	d on	and	was give	en Applic	ation		
	No		by the foll	owing Of	fice "	".		

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Application No.	Filing Date	Office

***************************************	THE	**************************************
Leader-Franchischer Control Co		

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Mu-Chu LEE

Printed Name in English

Name in Native Language (if other than English)

MS Docket No.: 403089-US-NP

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