PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4743664

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KUN JING	12/15/2017
HAOYONG ZHANG	11/16/2017
XIAOSONG YANG	11/22/2017
JIAN LI	11/15/2017
SHUANG PENG	12/12/2017

RECEIVING PARTY DATA

Name:	MICROSOFT CORPORATION
Street Address:	ONE MICROSOFT WAY
City:	REDMOND
State/Country:	WASHINGTON
Postal Code:	98052

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15115505

CORRESPONDENCE DATA

Fax Number: (816)421-5547

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: 816-474-6550 Email: shulvey@shb.com

SHOOK, HARDY & BACON L.L.P. **Correspondent Name:**

Address Line 1: 2555 GRAND BLVD.

INTELLECTUAL PROPERTY DEPARTMENT Address Line 2:

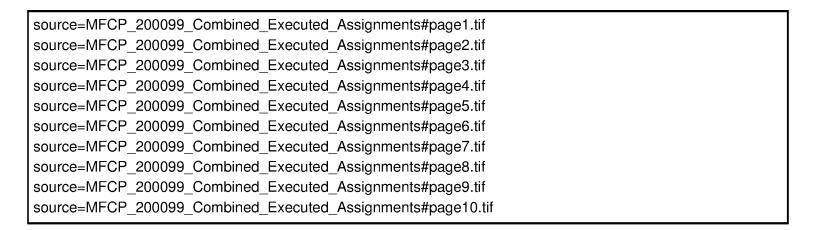
Address Line 4: KANSAS CITY, MISSOURI 64108-2613

ATTORNEY DOCKET NUMBER:	340648.01/MFCP.200099
NAME OF SUBMITTER:	JOHN S. GOLIAN
SIGNATURE:	/JOHN S. GOLIAN/
DATE SIGNED:	12/20/2017

Total Attachments: 10

PATENT REEL: 044447 FRAME: 0276

504696942



PATENT REEL: 044447 FRAME: 0277

I <u>KUN JING</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a nonprovisional patent application entitled "ENTITY PAGE GENERATION AND ENTITY RELATED SEARCHING" ("APPLICATION"), which:
will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of Shook, Hardy & Bacon L.L.P., 2555 Grand Bivd., Kansas City, Missouri 64108, who are associated with customer number 45809 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on and given Application No by the following Office) this APPLICATION's Application No., filing date, and Office, when known:
was filed on <u>January 30, 2014</u> and was given Application No. <u>PCT/CN2014/071845</u> by the following Office " <u>PCT or WIPO International Bureau</u> ";
Microsoft Corporation, a Washington Corporation, on behalf of itself and its

Microsoft Corporation, a Washington Corporation, 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 in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, 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	dátecesecese
15/115,505	07/29/2016	USPTO	
	•		
8 10.00 00-08 80-00 00 00 00 00 00 00 00 00 00 00 00 00			

Page 1 of 2

6130694 v1

MS Docket No. 340648.01 (OC Docket No. MFCP.200099

PATENT ASSIGNMENT

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 in the INVENTION and the APPLICATION (and 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).

Kun IND	2×17-/2-/5
Inventor's Signated	Date
KUN JING	21.
Printed Name in English	Printed Name in Native Language
	(if other than English)

Page 2 of 2

6130694 v1

inventor of subject matter ("	INVENTION") disclosed and, "ENTITY PAGE GENERA"	al inventor or an original joint or claimed in a nonprovisional TION AND ENTITY RELATED
ASSIGNEE'S legal 2555 Grand associated with REPRESENTATIV on	ASSIGNOR hereby autlander representatives, of Shool Blvd., Kansas City, Miss houstomer number 458 ES), to insert here in and by filing date, and Office, whe	k, Hardy & Bacon L.L.P., ouri 64108, who are 09 (ASSIGNEE'S LEGAL in parentheses (filed given Application the following) this APPLICATION's
⊠ was filed on No. <u>PCT/CN20</u>	January 30, 2014 and 14/071845 by the formal Bureau ":	was given Application
Microsoft Corporation successors and assigns ("ASS entire and exclusive rights, t (and all other applications	, a Washington Corporation iGNEE"), is entitled to, and itle and interest in the INV and patents derived the United States, its territorical	n, on behalf of itself and its is desirous of acquiring, the ENTION and the APPLICATION erefrom, such as continuing ies, and all foreign countries
ASSIGNOR hereby REPRESENTATIVES to insert following table for any APPLIC	authorizes, and requ the Application No., filin ATION DERIVATIVES after th	g date, and Office into the
Application No. 15/115,505	Filing Date 07/29/2016	Office USPTO

Application No.	Filing Date	Office
15/115,505	Filing Date 07/29/2016	USPTO
<u> </u>		

Page 1 of 2

6130694 v1

MS Docket No. 340648.01 (OC Docket No. MFCP.200099

PATENT ASSIGNMENT

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 in the INVENTION and the APPLICATION (and 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).

Inventor's Signature

HAOYONG ZHANG

Printed Name in English

Date

<u> 58 95 3</u>

Printed Name in Native Language

(if other than English)

I XIAOSONG YANG ("ASSIGNOR inventor of subject matter ("INVENTION patent application entitled "ENTITY SEARCHING" ("APPLICATION"), which:	N") disclosed and/o	r claimed in a nonprovisiona
will be filed. ASSIGN ASSIGNEE'S legal represe 2555 Grand Blvd., Ka associated with custom REPRESENTATIVES), to on No. Office Application No., filing dat	ntatives, of Shook, nsas City, Misson ner number 4580! insert here in and by	Hardy & Bacon L.L.P., uri 64108, who are 9 (ASSIGNEE'S LEGAL parentheses (filed given Application the following this APPLICATION's
was filed on January No. PCT/CN2014/07184 WIPO International Bureau Microsoft Corporation, a Washis successors and assigns ("ASSIGNEE"), entire and exclusive rights, title and i (and all other applications and parapplications, in and for the United S ("APPLICATION DERIVATIVES"));	30, 2014 and was 45 by the folus 5 by the folus 5 by the folus 6 by the folus 6 by the folk 6 by the	ras given Application Howing Office " <u>PCT or</u> I, on behalf of itself and it
ASSIGNOR hereby authorize REPRESENTATIVES to insert the App following table for any APPLICATION Displayers.	lication No., filing	date, and Office into the
Application No. Filing I	Date	Office
15/115,505 07/29	/2016	USPTO

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 in the INVENTION and the APPLICATION (and 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).

Inventor's Signature

XIAOSONG YANG

Printed Name in English

11/22/2017 Date 书别轮松

Printed Name in Native Language

(if other than English)

subject matter ("INVENTION application entitled "ENTIT" ("APPLICATION"), which: will be filed. ASSIGNEE'S leg 2555 Grand associated will REPRESENTATIV on No. Office Application No was filed on NoPCT/CN26 WIPO Internation	ASSIGNOR hereby (ASSIGNOR hereby) (al representatives, of the customer number by) (b) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	d given Application the following this APPLICATION's e, when known; and was given Application the following Office " <u>PCT or</u>	m 1000 1000 1000 1000 1000 1000 1000 10
successors and assigns ("AS entire and exclusive rights, (and all other applications	SIGNEE"), is entitled to title and interest in th s and patents derive e United States, its te	oration, on behalf of itself and it o, and is desirous of acquiring, th ne INVENTION and the APPLICATIOn nd therefrom, such as continuin perritories, and all foreign countrie	N N
	the Application No.,	requests, ASSIGNEE'S LEGA , filing date, and Office into th after they are known;	
Application No.	Filing Date	Office	,
15/115,505	07/29/2016	USPTO .	The state of the s
		- 	

Page 1 of 2

PATENT REEL: 044447 FRAME: 0284

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 in the INVENTION and the APPLICATION (and 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).

AM	11/15/2017
Inventor's Signature	Date
JIAN LI	香甸
Printed Name in English	Printed Name in Native Language
	(if other than English)

I <u>SHUANG PENG</u> ("ASS inventor of subject matter ("IN patent application entitled <u>SEARCHING"</u> ("APPLICATION"), v	VENTION") disclosed and/ " <u>ENTITY PAGE GENERA</u> T		ıl
ASSIGNEE'S legal 2555 Grand Blo associated with REPRESENTATIVES on No. Office Application No., f	and by iling date, and Office, whe	k, Hardy & Bacon L.L.P., puri 64108, who are 09 (ASSIGNEE'S LEGAL n parentheses (filed given Application the following) this APPLICATION's	
	nuary 30, 2014 and 14/071845 by the fo		
Microsoft Corporation, successors and assigns ("ASSIC entire and exclusive rights, titl (and all other applications applications, in and for the U("APPLICATION DERIVATIVES"));	INEE"), is entitled to, and le and interest in the INV and patents derived the	ENTION and the APPLICATION erefrom, such as continuing	a N J
ASSIGNOR hereby in REPRESENTATIVES to insert the REPRESENTATIVES to insert the following table for any APPLICA	ne Application No., filin		_
Application No.	Filing Date	Office	
15/115,505	07/29/2016	USPTO	
			:
			;
·			

Page 1 of 2

6130694 vl

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 in the INVENTION and the APPLICATION (and 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).

4	
Shear Peng	2017/12/12
Inventor's Signature	Date
SHUANG PENG	女元
Printed Name in English	Printed Name in Native Language
	(if other than English)

Page 2 of 2

6130694 v1

PATENT REEL: 044447 FRAME: 0287

RECORDED: 12/20/2017