504015936 09/21/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4062594

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KYRYLO TROPIN	05/08/2008
KA CHEUNG SIA	04/25/2014
GU XU	06/24/2014
BHUVAN MIDDHA	05/01/2014
QI YAO	04/26/2014
SANDEEP DEY	04/24/2014
JUNBIAO TANG	04/26/2014

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13828316

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: 8164746550

Email: dstrecker@shb.com

Correspondent Name: SHOOK, HARDY AND BACON L.L.P.

Address Line 1: 2555 GRAND BLVD

Address Line 4: KANSAS CITY, MISSOURI 64108

ATTORNEY DOCKET NUMBER:	337952.01/MFCP.177741
NAME OF SUBMITTER:	ASHLEY N. STURGEON
SIGNATURE:	/ASHLEY N. STURGEON/
DATE SIGNED:	09/21/2016

Total Attachments: 16 source=MFCP_177741_All_Inventor_Executed_Assignments#page1.tif source=MFCP 177741 All Inventor Executed Assignments#page2.tif source=MFCP 177741 All Inventor Executed Assignments#page3.tif source=MFCP 177741 All Inventor Executed Assignments#page4.tif source=MFCP 177741 All Inventor Executed Assignments#page5.tif source=MFCP 177741 All Inventor Executed Assignments#page6.tif source=MFCP 177741 All Inventor Executed Assignments#page7.tif source=MFCP_177741_All_Inventor_Executed_Assignments#page8.tif source=MFCP 177741 All Inventor Executed Assignments#page9.tif source=MFCP 177741 All Inventor Executed Assignments#page10.tif source=MFCP_177741_All_Inventor_Executed_Assignments#page11.tif source=MFCP 177741 All Inventor Executed Assignments#page12.tif source=MFCP 177741 All Inventor Executed Assignments#page13.tif source=MFCP_177741_All_Inventor_Executed_Assignments#page14.tif source=MFCP_177741_All_Inventor_Executed_Assignments#page15.tif source=MFCP_177741_All_Inventor_Executed_Assignments#page16.tif

REDACTED		
Microsoft Corporation Employee Agreement ("Agreement")		
As a condition of my employment with MICROSOFT CORPORATION ("MICROSOFT"), a Washington corporation, and in consideration of the compensation now and hereafter paid to me, I agree as follows:		
REDACTED		
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5. <u>Inventions.</u> I will promptly and fully disclose to MICROSOFT any and all inventions, discoveries, designs, developments, improvements and trade secrets, whether or not patentable (collectively "Inventions") that I solely or jointly may conceive, develop, reduce to practice or otherwise produce during my employment with MICROSOFT, including those Inventions I contend that MICROSOFT does not own. Subject to the NOTICE below, I agree to grant and I hereby grant, transfer and assign to MICROSOFT or its designee all my rights, title and interest in and to such Inventions. I waive and quitclaim to MICROSOFT or its designee any and all claims of any nature whatsoever that I now or hereafter may have for infringement of any patent application, patent, or other intellectual property right relating to any Inventions so assigned to MICROSOFT or its designee.

NOTICE: My obligation to assign shall not apply to any Invention that I can establish:

- a) was developed entirely on my own time without using any equipment, supplies, facilities, or trade secret information owned or supplied to me by MICROSOFT;
- b) does not relate (i) directly to the business of MICROSOFT or (ii) to the actual or demonstrably anticipated research or development of MICROSOFT; and
- c) does not result, in whole or in part, from any work performed by me for MICROSOFT.

I agree to grant and I hereby grant, transfer and assign to MICROSOFT or its designee all my rights, title and interest in and to any and all Inventions full title to which may be required to lie in the United States government by law or by any contract between MICROSOFT and the United States government or any of its agencies. In addition to the rights provided to MICROSOFT under paragraph 6 below, as to any Invention complying with 5(a)-(c) above that results in any product, service or development with potential commercial application, MICROSOFT shall be given the right of first refusal to obtain exclusive rights to the Invention and such product, service or development.

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I HAVE READ AND FULLY UNDERSTOOD THIS AGREEMENT. BY SIGNING BELOW, I AGREE TO BE BOUND BY ALL OF ITS TERMS.

Last Revised 05/07

Your electronic signature is: Kirill Tropin You submitted this document on Thu, 08 May 2008 09:32:48 GMT.

I, KA CHEUNG SIA ("AS inventor of subject matter ("IN"		l inventor or an original joint
patent application entitled		·
RESULTS" ("APPLICATION"), whi		
will be fi ASSIGNEE'S legal Grand Blvd., Kar customer number here in parenthes No. Office Application No., f	led. ASSIGNOR hereby representatives, of Shool nsas City, Missouri 6410 45809 (ASSIGNEE'S LEGA ses (filed onby lling date, and Office, whe on March 14, 2013 an) this APPLICATION's
Office);	the following Office (03	- 03 ratem and frauemark
successors and assigns ("ASSIC entire and exclusive rights, titl (and all other applications a applications, in and for the U ("APPLICATION DERIVATIVES"));	GNEE"), is entitled to, and e and interest in the INV and patents derived the United States, its territoriauthorizes, and require Application No., filin	ENTION and the APPLICATION erefrom, such as continuing ies, and all foreign countries uests, ASSIGNEE'S LEGAL g date, and Office into the
Application No.	Filing Date	Office

Page 1 of 2

5807768 v1

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).

May Sia 4/25/2014

KA CHEUNG SIA Date

Ka Cheung Sia 実行を作

Printed Name in English Printed Name in Native Language (if other than English)

subject matter ("INVENTION")	disclosed and/or o	intor or an original joint inventor of claimed in a nonprovisional patent FOR RANKING SEARCH RESULTS"
ASSIGNEE'S legal Grand Blvd., Ka customer numbe here in parenthe No. Office	l representatives, of insas City, Missouri er 45809 (ASSIGNEE'S eses (filed on	hereby authorizes, and requests, Shook, Hardy & Bacon L.L.P., 2555 64108, who are associated with LEGAL REPRESENTATIVES), to insert and given Application by the following) this APPLICATION's e, when known;
		13 and was given Application No e (US – US Patent and Trademark
successors and assigns ("ASSI entire and exclusive rights, til (and all other applications	GNEE"), is entitled to tle and interest in th and patents derive United States, its te	oration, on behalf of itself and its o, and is desirous of acquiring, the se INVENTION and the APPLICATION ed therefrom, such as continuing erritories, and all foreign countries
	the Application No.,	requests, ASSIGNEE'S LEGAL , filing date, and Office into the lfter they are known;
Application No.	Filling Date	Office
	<u> </u>	

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).

Ca/Sin	Le/24/2014
GU XU	Date
Gu Xu	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I, BHUVAN MIDDHA ("AS	SSIGNOR") am the origina	l inventor or an original joint
inventor of subject matter ("INV	/ENTION") disclosed and/o	or claimed in a nonprovisional
patent application entitled '	'PART-OF-SPEECH TAGG	NG FOR RANKING SEARCH
RESULTS" ("APPLICATION"), which	ch:	
ASSIGNEE'S legal Grand Blvd., Kar customer number here in parenthes No. Office Application No., fi	representatives, of Shook isas City, Missouri 6410 45809 (ASSIGNEE'S LEGA ses (filed onby ling date, and Office, whe) this APPLICATION's
0ffice);	ne following Office (05	- US Patent and Trademark
successors and assigns ("ASSIC entire and exclusive rights, title (and all other applications a applications, in and for the U ("APPLICATION DERIVATIVES"));	GNEE"), is entitled to, and e and interest in the INV and patents derived the	ENTION and the APPLICATION refrom, such as continuing
ASSIGNOR hereby	authorizes, and requ	uests, ASSIGNEE'S LEGAL
REPRESENTATIVES to insert the	ne Application No., filin	g date, and Office into the
following table for any APPLICA	TION DERIVATIVES after th	iey are known;
Application No.	Filing Date	Office
Appreation Hor	Timig 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 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).

BHUVAN MIDDHA

BHUVAN MIDDHA

Printed Name in English

05/01/2014

Date

Printed Name in Native Language

(if other than English)

(and all other applications, in and for depositions, in and for deposition) ("APPLICATION DERIVATIVE ASSIGNOR hereby REPRESENTATIVES to installable for any AP	ons and patents derive the United States, its of ES")); by authorizes, and ert the Application Notes PLICATION DERIVATIVES	
following table for any AP	PLICATION DERIVATIVES	after they are known;

Page 1 of 2

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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 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).

QI YAO

Printed Name in English

Date

Printed Name in Native Language (if other than English)

I, SANDEEP DEY ("ASSIGNOR") am the original inventor or an original joint

inventor of subject matter ("INV patent application entitled ' RESULTS" ("APPLICATION"), which	'PART-OF-SPEECH TAGG	•
ASSIGNEE'S legal Grand Blvd., Kar customer number here in parenthes No. Office Application No., fi	representatives, of Shook isas City, Missouri 6410 45809 (ASSIGNEE'S LEGA ses (filed onby by) this APPLICATION's
<u> </u>	•	– US Patent and Trademark
successors and assigns ("ASSIC entire and exclusive rights, titl (and all other applications a applications, in and for the U ("APPLICATION DERIVATIVES"));	ENEE"), is entitled to, and e and interest in the INVI and patents derived the United States, its territori authorizes, and requ	ENTION and the APPLICATION erefrom, such as continuing es, and all foreign countries uests, ASSIGNEE'S LEGAL
Application No.	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 in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES);

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Gandap Dey	04/24/2014
SANDEEP DEY	Date
Sandeep Dey	
Printed Name in English	Printed Name in Native Language (if other than English)

I, JUNBIAO TANG ("ASSI	GNOR") am the original	inventor or an original joint
inventor of subject matter ("INV	/ENTION") disclosed and/o	or claimed in a nonprovisional
patent application entitled '	PART-OF-SPEECH TAGGI	NG FOR RANKING SEARCH
RESULTS" ("APPLICATION"), which	ch:	
ASSIGNEE'S legal Grand Blvd., Kan customer number here in parenthes No. Office Application No., fi	representatives, of Shook sas City, Missouri 6410 45809 (ASSIGNEE'S LEGA es (filed onby ling date, and Office, whe) this APPLICATION's
Office);	the following Office (03	- 03 ratellt allu Hauellaik
successors and assigns ("ASSIC entire and exclusive rights, titl (and all other applications a applications, in and for the L ("APPLICATION DERIVATIVES"));	GNEE"), is entitled to, and e and interest in the INVI	ENTION and the APPLICATION refrom, such as continuing
ASSIGNOR hereby	authorizes, and requ	uests, ASSIGNEE'S LEGAL
REPRESENTATIVES to insert the	ne Application No., filing	g date, and Office into the
following table for any APPLICA		
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5807811 v1

MS Docket No. 337952.01 (OC Docket No. MFCP.177741)

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).

angre	4126/2014
JUNBIAO TANG	Date
Printed Name in English	Printed Name in Native Language
Printed Name in English	(if other than English)

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5807811 v1

RECORDED: 09/21/2016