#### 502225760 02/08/2013

# PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Zhiwei Li	12/05/2012
Wei-Ying Ma	01/22/2013
Heung-Yeung Shum	01/29/2013
Lei Zhang	12/07/2012
Rui Cai	12/05/2012

#### **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:	13692922

### **CORRESPONDENCE DATA**

Fax Number: 5093238979

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Phone: 509-324-9256

Email: amandas@leehayes.com LEE & HAYES, PLLC Correspondent Name: Address Line 1: 601 W Riverside Address Line 2: Suite 1400

Address Line 4: Spokane, WASHINGTON 99201

ATTORNEY DOCKET NUMBER:	MS1-4854USC1
NAME OF SUBMITTER:	Amanda Sasser

**PATENT REEL: 029784 FRAME: 0723** 502225760

Total Attachments: 10	
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PATENT REEL: 029784 FRAME: 0724

PATENT	ASSIGNMENT	MS Docket No.:	327761.xx
	A	ttorney Docket No.:	MS1- 4854USC1
Zhiwei	Li	("ASSIGNOR") am	the original inventor
or an original joint inventor of in a patent application entitled	subject matter		
("APPLICATION"), which:			
will be filed.	ASSIGNOR her	eby authorizes, a	nd requests,
Department, Microwashington 9805 here in parenth Application No. States Patent Application No., 1  was filed on1	rosoft Corporation  2 (ASSIGNEE'S LINESES (filed on both both both both both both both both	Office " <u>US – United</u> Corporation, on beh ed to, and is desiro in the INVENTION a erived therefrom, s	ay, Redmond, VES), to insert and given te <u>US - United</u> PPLICATION's INO States Patent Half of itself and its Hus of acquiring, the Hother APPLICATION Such as continuing
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REPRESENTATIVES to insert			
following table for any APPLICA			
Application No.	Filing Date	Office	
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PATENT ASSIGNMENT

MS Docket No.:

327761.xx

Attorney Docket No.:

MS1-4854USC1

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).

2hiwei hi

Inventor's Signature

Zhiwei Li

Printed Name in English

12/05/2012 Date 李二伟

Printed Name in Native Language (if other than English)

	PATENT A	SSIGNMENT	MS Docket No.:	327761.xx
		Att	orney Docket No.:	MS1- 4854USC1
	Wei-Ying f			the original inventor
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	plication entitled			
("APPLICATIO	N"), which:			
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	-		n, One Microsoft W	
,	Washington 98052	(ASSIGNEE'S LE	GAL REPRESENTAT	IVES), to insert
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Page 1 of 2

PATENT ASSIGNMENT

MS Docket No.:

327761.xx

Attorney Docket No.: MS1-4854USC1

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Date

Wei-Ying Ma

Printed Name in English

Printed Name in Native Language

(if other than English)

PATENT	ASSIGNMENT	MS Docket No.:	327761.xx
	Atto	orney Docket No.:	MS1- 4854USC1
Heung-Yeun	3 Shum	("ASSIGNOR") am	the original inventor
or an original joint inventor of	subject matter ("l	NVENTION") disclo	sed and/or claimed
in a patent application entitled			
("APPLICATION"), which:			
$\square$ will be filed.	ASSIGNOR herel	oy authorizes, a	nd requests,
ASSIGNEE'S legal	representatives, o	f the Law and Cor	porate Affairs
Department, Micr	osoft Corporation	, One Microsoft W	ay, Redmond,
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Microsoft Corporation, successors and assigns ("ASSI			
entire and exclusive rights, til			
(and all other applications			
applications, in and for the	•		
("APPLICATION DERIVATIVES"))		territories, and t	an ioreign countries
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ASSIGNOR hereby	authorizes, an	d requests,	ASSIGNEE'S LEGAL
REPRESENTATIVES to insert	the Application N	lo., filing date, a	and Office into the
following table for any APPLICA	ATION DERIVATIVE	S after they are kn	own;
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 in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES);

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1	1-29-13
Inventor's Signature	Date
Heung-Yeung Shum	
Printed Name in English	Printed Name in Native Language
	(if other than English)

PATENT	ASSIGNMENT	MS Docket No.:	327761.xx		
	Atte	orney Docket No.:	MS1- 4854USC1		
Lei Zha	ng	("ASSIGNOR") am	the original inventor		
or an original joint inventor of					
in a patent application entitled					
	Long-Query Retri	eval			
("APPLICATION"), which:					
☐ will be filed.	ASSIGNOR herel	by authorizes, a	nd requests,		
		f the Law and Cor			
Department, Micr	osoft Corporation	, One Microsoft Wa	ay, Redmond,		
Washington 9805	2 (ASSIGNEE'S LEC	AL REPRESENTATIV	/ES), to insert		
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<u>and Trademark O</u> Microsoft Corporation,	-	rnaration on heb	alf of itself and its		
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PATENT ASSIGNMENT MS Docket No.: 327761.xx

Attorney Docket No.: MS1-4854USC1

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).

es 2h-1 Per. 7, 2012

ntor's Signature C

Lei Zhang

Printed Name in English Printed Name in Native Language

(if other than English)

PATENT A	SSIGNMENT	MS Docket No	o.: 327761.xx	
			o.: MS1- 4854USC1	اشبيين
Rui Cal		("ASSIGNOR") a	ım the original invento	or
or an original joint inventor of				
in a patent application entitled				
("APPLICATION"), which:				
will be filed.	ASSIGNOR her	ebv authorizes.	and requests.	
ASSIGNEE'S legal i				
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Washington 9805	,			
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and Trademark Of				
Microsoft Corporation,	_			
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("APPLICATION DERIVATIVES"));	THE CONTRACTOR OF THE			
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PATENT ASSIGNMENT

MS Docket No.:

327761.xx

Attorney Docket No.:

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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

Rui Cai

Printed Name in English

do12.12.05

Date

蔡 锐

Printed Name in Native Language

(if other than English)