# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Michael John Novak	04/25/2013
Chris Guzak	04/25/2013
Sangeeta Ranjit	04/24/2013
Scott David Hoogerwerf	04/23/2013
Amnon Itamar Govrin	04/23/2013
Marc Wautier	04/23/2013
Kiernon Reiniger	04/24/2013
Kyle Thomas Beck	04/24/2013
Tyler Kien Beam	04/23/2013
Oded Yehuda Shekel	04/26/2013
Relja Ivanovic	04/24/2013

## **RECEIVING PARTY DATA**

Name:	icrosoft Corporation	
Street Address:	One Microsoft Way	
City:	Redmond	
State/Country:	WASHINGTON	
Postal Code:	98052	

#### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13873264

### CORRESPONDENCE DATA

502328698

Fax Number: 4259367329

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

425-707-9382 Phone: vffiling@microsoft.com Email:

Correspondent Name: Assal Meftahi

**PATENT** 

**REEL: 030312 FRAME: 0467** 

Address Line 1: One Microsoft Way  Address Line 2: Patent Group Docketing Dept  Address Line 4: Redmond, WASHINGTON 98052		
ATTORNEY DOCKET NUMBER:	339010.01	
NAME OF SUBMITTER:	Vikas Khanna	
Signature:	/Vikas Khanna/	
Date:	04/30/2013	
Total Attachments: 22 source=339010-01-Executed-Assignment#page1.tif source=339010-01-Executed-Assignment#page2.tif source=339010-01-Executed-Assignment#page3.tif source=339010-01-Executed-Assignment#page5.tif source=339010-01-Executed-Assignment#page6.tif source=339010-01-Executed-Assignment#page6.tif source=339010-01-Executed-Assignment#page8.tif source=339010-01-Executed-Assignment#page8.tif source=339010-01-Executed-Assignment#page9.tif source=339010-01-Executed-Assignment#page10.tif source=339010-01-Executed-Assignment#page11.tif source=339010-01-Executed-Assignment#page12.tif source=339010-01-Executed-Assignment#page14.tif source=339010-01-Executed-Assignment#page15.tif source=339010-01-Executed-Assignment#page16.tif source=339010-01-Executed-Assignment#page16.tif source=339010-01-Executed-Assignment#page18.tif source=339010-01-Executed-Assignment#page18.tif source=339010-01-Executed-Assignment#page18.tif source=339010-01-Executed-Assignment#page18.tif source=339010-01-Executed-Assignment#page18.tif source=339010-01-Executed-Assignment#page18.tif source=339010-01-Executed-Assignment#page19.tif		

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PATENT REEL: 030312 FRAME: 0468

MS Docket No.: 339010.01 I, Michael John Novak ("ASSIGNOR"), am the original inventor or an original joint

inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "SEARCHING AND PLACEHOLDERS" ("APPLICATION"), which: 🖾 will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on \_and given 13/873264 Application | by following Office US 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 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., filling date, and Office into the following table for any APPLICATION DERIVATIVES after they are known; 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

MS Docket No.: 339010.01

the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES);

	4/25/2018
Inventor's Signature	Date
Michael John Novak	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I, Chris Guzak ("ASSIGNOR"), am the original inventor or an original joint

MS Docket No.: 339010.01

		subject matter ("INVENTION") disclosed and/or claimed in a patent wittled "SEARCHING AND PLACEHOLDERS" ("APPLICATION"), which:
\$	1	will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on
<u> </u>		was filed on and was given Application No
successors entire and (and all c application	ar ex oth 15,	oft Corporation, a Washington Corporation, on behalf of itself and its of assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the clusive rights, title and interest in the INVENTION and the APPLICATION are applications and patents derived therefrom, such as continuing in and for the United States, its territories, and all foreign countries (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	
***************************************			

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);

MS Docket No.: 339010,01

	Cacel	4-25-2017
	Inventor's Signature	Date
	Chris Guzak	
	Printed Name in English	Printed Name in Native Language
***		(if other than English)

inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "SEARCHING AND PLACEHOLDERS" ("APPLICATION"), which: will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on 30-APR-2013 ..... and given 13/873264 Application Sin. bν the following US Patent and Trademark Office 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 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

I, Sangeeta Ranjit ("ASSIGNOR"), am the original inventor or an original joint

MS Docket No.: 339010.01

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to

INVENTION and the APPLICATION (and APPLICATION DERIVATIVES);

the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest in the

MS Docket No.: 339010.01

Q win ir	4/24/2013
Inventor's Signature	Date
Sangeeta Ranjit	***************************************
Printed Name in English	Printed Name in Native Language
	(if other than English)

MS Docket No.: 339010.01

application entitled "SEARCHING AND PLACEHOLDERS" ("APPLICATION"), which: X will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LECAL REPRESENTATIVES), to insert here in parentheses (filed on \_\_\_\_\_\_\_ 30-APR-2013 \_\_\_\_\_ and given 13/873264 by Application | No. \_\_\_\_ the following US Patent and Trademark Office this APPLICATION'S Office Application No., filing date, and Office, when known: was filed on \_\_\_\_\_ and was given Application No by the following Office "\_\_\_\_\_\_ 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")): hereby authorizes, ASSIGNOR 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: Office Filing Date Application No.

I, Scott David Hoogerwerf ("ASSIGNOR"), am the original inventor or an original

joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent

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);

MS Docket No.: 339010.01

TA A	4/23/13 Oate
Scott David Hoogenwerf Printed Name in English	Printed Name in Native Language (if other than English)

MS Docket No.: 339010.01

joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "SEARCHING AND PLACEHOLDERS" ("APPLICATION"), which: 🖄 will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insent here in parentheses (filed on \_\_\_\_\_ 30-APR-2013 13/873264 Application No. by the following US Patent and Trademark Office ) this APPLICATION'S Office ..... Application No., filing date, and Office, when known: was filed on \_\_\_\_\_ and was given Application No by the following Office "\_\_\_\_\_ 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 LECAL REPRESENTATIVES to insert the Application No., filling date, and Office into the following table for any APPLICATION DERIVATIVES after they are known: Office Filing Date Application No.

Amnon Itamar Covrin ("ASSIGNOR"), am the original inventor or an original

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):

MS Docket No.: 339010.01

Anna	4/23/2013
Inventor's Signature	Oate
Amnon Itamar Govrin	אמנון איתמר געברין
Printed Name in English	Printed Name in Native Language
	(if other than English)

Marc Wautier ("ASSIGNOR"), am the original inventor or an original joint

inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent

MS Docket No.: 339010.01

application entitled "SEARCHING AND PLACEHOLDERS" ("APPLICATION"), which: W will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on \_\_\_\_\_\_\_\_ and given 13/873264 by Application | No. the US Patent and Trademark Office this APPLICATION'S Office Application No., filing date, and Office, when known; was filed on \_\_\_\_\_ and was given Application No by the following Office "\_\_\_\_\_ 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")): requests, ASSIGNEE'S LEGAL authorizes, and hereby ASSIGNOR REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known: Office\_\_\_\_ Filing Date Application No.

Page 1 of 2

acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to

For good and valuable consideration, the receipt of which is hereby

the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES);

MS Docket No.: 339010.01

	<u>41231 B</u>
Inventor's Signature	Date
Marc Wautier	
Printed Name in English	Printed Name in Native Language
	(if other than English)

MS Docket No.: 339010.01

 Kiernon Reiniger ("ASSIGNOR"), am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "SEARCHING AND PLACEHOLDERS" ("APPLICATION"), which: 🖾 will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to Insert here in parentheses (filed on 30-APR-2013 and given 13/873264 Application | No. by the following US Patent and Trademark Office 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 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")): requests, ASSIGNEE'S LEGAL authorizes, ASSIGNOR hereby and REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known: Office Application No. Filing Date

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);

MS Docket No.: 339010.01

 112	4/24/13
Inventor's Signature	Date
Kiernon Reiniger	
Printed Name in English	Printed Name in Native Language
	(if other than English)

inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "SEARCHING AND PLACEHOLDERS" ("APPLICATION"), which: 🔯 will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on \_\_\_\_\_\_\_\_ and given Application 13/873264 by the following Office US 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 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

I. Kyle Thomas Beck ("ASSICNOR"), am the original inventor or an original joint

MS Docket No.: 339010.01

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to

MS Docket No.: 339010.01

the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES);

72 - Jan 31	4-24-13
Inventor's Signature	Date
Kyle Thomas Beck	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I, Tyler Kien Beam ("ASSICNOR"), am the original inventor or an original joint

inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent

MS Docket No.: 339010.01

application e	ntitled "SEARCHIN	G AND PLACEHOLDERS" (	"APPLICATION"), which:
	ASSIGNEE'S legal Department, Micr Washington 9805 here in parenth Application No	representatives, of the Losoft Corporation, One 2 (ASSIGNEE'S LEGAL REIdes (Filed on 13/873264	by the following ) this APPLICATION's
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	by the following t	Office "	· · · · · · · · · · · · · · · · · · ·
successors a entire and ex- (and all oth applications, ("APPLICATIO	nd assigns ("ASSK xclusive rights, tit ner applications in in and for the t N DERIVATIVES"));	GNEE"), is entitled to, ar le and interest in the IN and patents derived ti United States, its territo	ion, on behalf of itself and its and its desirous of acquiring, the IVENTION and the APPLICATION herefrom, such as continuing pries, and all foreign countries quests. ASSIGNEE'S LEGAL
			ing date, and Office into the
following tab	le for any APPLICA	TION DERIVATIVES after	they are known;
Application N	lo.	Filing Date	Office
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for g	jood and valuab	le consideration, the	receipt of which is hereby

Page 1 of 2

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);

MS Docket No.: 339010.01

	2013/04/23
Inventor's Signature	Oate
Tyler Kien Beam	
Printed Name in English	Printed Name in Native Language
	(if other than English)

I, Oded Yehuda Shekel ("ASSIGNOR"), am the original inventor or an original joint

MS Docket No.: 339010 01

inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "SEARCHING AND PLACEHOLDERS" ("APPLICATION"), which: will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on 30-APR-2013 and given 13/873264 Application No. bγ the following US Patent and Trademark Office 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 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; Office Filing Date Application No.

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MS Docket No.: 339010.01

the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES);

	<u> </u>	04/6/15	
Inventor's Sign	ature	Date	
Oded Yehuda S	Shekel		*****
Printed Name i	n English	Printed Name in Native Language	
		(if other than English)	

I, Relja Ivanovic ("ASSICNOR"), am the original inventor or an original joint

inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent

MS Docket No.: 339010.01

application e	ntitled "SEARC	HING AND PLACE	HOLDERS" ("AI	PPLICATION")	, which:
	ASSIGNEE'S le Department, Washington 9 here in par Application Office	i. ASSIGNOR  gal representativ  Microsoft Corpora  8052 (ASSIGNEE':  entheses (filed  No. 13/8732  US Patent and Trademark Office  o., filling date, an	es, of the Law ation, One Mic S LEGAL REPRE on	and Corpora crosoft Way, in ESENTATIVES) on a by the this APPLI	ite Affairs Redmond, , to insert nd given following
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<b></b>					
	by the followi	ng Office "	***************************************		
successors a entire and e (and all oth applications, ("APPLICATIC	ind assigns (7) xclusive rights ter application in and for to IN DERIVATIVE	on, a Washingtoi ASSICNEE"), is en i, title and intere ns and patents he United States (S")); / authorizes,	titled to, and st in the INVE derived ther , its territorie	is desirous c NTION and ti refrom, such es, and all fo	of acquiring, the he APPLICATION as continuing preign countries
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For g	good and va	iluable consideri	ation, the re	eceipt of w	hich is hereby

Page 1 of 2

acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to

PATENT REEL: 030312 FRAME: 0489

MS Docket No.: 339010.01

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).

	4/24/13		
Inventor's Signature	Date		
Relja Ivanovic	PERA UBAHOBUTI		
Printed Name in English	Printed Name in Native Language		
	(if other than English)		

Page 2 of 2

PATENT REEL: 030312 FRAME: 0490