

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>YUE-SHENG LIU</td> <td>11/15/2012</td> </tr> <tr> <td>XIAO-SONG YANG</td> <td>11/06/2012</td> </tr> <tr> <td>HUI SHEN</td> <td>11/06/2012</td> </tr> <tr> <td>WEIHU WANG</td> <td>11/02/2012</td> </tr> <tr> <td>JOHN G BENNETT</td> <td>11/11/2012</td> </tr> </tbody> </table>		Name	Execution Date	YUE-SHENG LIU	11/15/2012	XIAO-SONG YANG	11/06/2012	HUI SHEN	11/06/2012	WEIHU WANG	11/02/2012	JOHN G BENNETT	11/11/2012
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<table border="1"> <tr> <td>Name:</td> <td>MICROSOFT CORPORATION</td> </tr> <tr> <td>Street Address:</td> <td>ONE MICROSOFT WAY</td> </tr> <tr> <td>City:</td> <td>REDMOND</td> </tr> <tr> <td>State/Country:</td> <td>WASHINGTON</td> </tr> <tr> <td>Postal Code:</td> <td>98052</td> </tr> </table>		Name:	MICROSOFT CORPORATION	Street Address:	ONE MICROSOFT WAY	City:	REDMOND	State/Country:	WASHINGTON	Postal Code:	98052		
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CORRESPONDENCE DATA													
<p>Fax Number: 8164215547  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 8164746550        Email: twinson@shb.com        Correspondent Name: SHOOK HARDY &amp; BACON L.L.P.        Address Line 1: 2555 GRAND BOULEVARD        Address Line 4: KANSAS CITY, MISSOURI 64108</p>													
ATTORNEY DOCKET NUMBER:	MFCP.175496												
NAME OF SUBMITTER:	ANNE R. HANNAH												
Total Attachments: 10													

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PATENT ASSIGNMENT

I, Yue-Sheng Liu ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a nonprovisional patent application entitled "Per-Document Index for Semantic Searching" ("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 November 28, 2012 and given Application No. 13/687,135 by the following Office Shook Hardy & Bacon L.L.P.) 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"));

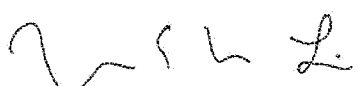
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For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest in the INVENTION and the 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).

	<u>11/5/2012</u>
Yue-Sheng Liu	Date
<u>YUE-SHENG LIU</u>	<u>刘跃生</u>
Printed Name in English	Printed Name in Native Language (if other than English)

PATENT ASSIGNMENT

I, Xiao-Song Yang ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a nonprovisional patent application entitled "Per-Document Index for Semantic Searching" ("APPLICATION"), which:

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	<u>11/06/2012</u>
Xiao-Song Yang	Date
<u>XIAOSONG YANG</u>	<u>杨晓松</u>
Printed Name in English	Printed Name in Native Language (if other than English)

PATENT ASSIGNMENT

I, Hui Shen ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a nonprovisional patent application entitled "Per-Document Index for Semantic Searching" ("APPLICATION"), which:

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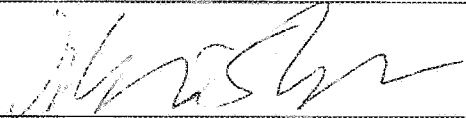
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	<u>11/6/2012</u>
Hui Shen	Date
<u>Hui Shen</u>	<u>沈偉</u>
Printed Name in English	Printed Name in Native Language (if other than English)



PATENT ASSIGNMENT

I, WeiHu Wang ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a nonprovisional patent application entitled "Per-Document Index for Semantic Searching" ("APPLICATION"), which:

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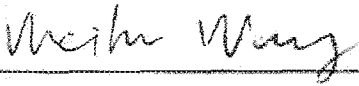
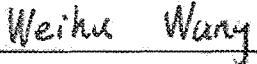
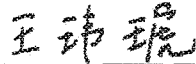
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	<u>2012.11.2</u>
Weihu Wang	Date
	
Printed Name in English	Printed Name in Native Language (if other than English)

MS Docket No. 337674.01  
(OC Docket No. MFCP.175496)

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I, John G. Bennett ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a nonprovisional patent application entitled "Per-Document Index for Semantic Searching" ("APPLICATION"), which:



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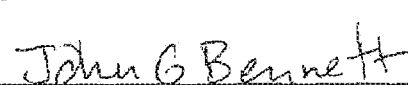
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 _____ John G. Bennett	<u>11/11/2012</u> _____ Date
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