

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3583941

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ARTEM A. OKS	02/25/2010
HANUMANTHA R. KODAVALLA	03/03/2010
SRIKUMAR RANGARAJAN	02/25/2010
MICHAEL JAMES ZWILLING	02/25/2010
PER-AKE LARSON	02/23/2010
JOSE A. BLAKELEY	02/25/2010
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MICROSOFT CORPORATION
<b>Street Address:</b>	ONE MICROSOFT WAY
<b>City:</b>	REMOND
<b>State/Country:</b>	WASHINGTON
<b>Postal Code:</b>	98052
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14921239
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
<b>Phone:</b>	425-707-9382
<b>Email:</b>	stevensp@microsoft.com
<b>Correspondent Name:</b>	MICROSOFT CORPORATION
<b>Address Line 1:</b>	ONE MICROSOFT WAY
<b>Address Line 4:</b>	REDMOND, WASHINGTON 98052
<b>NAME OF SUBMITTER:</b>	JEFFREY R. SADLOWSKI
<b>SIGNATURE:</b>	/Jeffrey R. Sadlowski/
<b>DATE SIGNED:</b>	10/23/2015
<b>Total Attachments: 12</b>	
source=328751-02-Executed-Assignment-As-Filed#page1.tif	

source=328751-02-Executed-Assignment-As-Filed#page2.tif  
source=328751-02-Executed-Assignment-As-Filed#page3.tif  
source=328751-02-Executed-Assignment-As-Filed#page4.tif  
source=328751-02-Executed-Assignment-As-Filed#page5.tif  
source=328751-02-Executed-Assignment-As-Filed#page6.tif  
source=328751-02-Executed-Assignment-As-Filed#page7.tif  
source=328751-02-Executed-Assignment-As-Filed#page8.tif  
source=328751-02-Executed-Assignment-As-Filed#page9.tif  
source=328751-02-Executed-Assignment-As-Filed#page10.tif  
source=328751-02-Executed-Assignment-As-Filed#page11.tif  
source=328751-02-Executed-Assignment-As-Filed#page12.tif

PATENT ASSIGNMENT

MS Docket No.: 328751.01

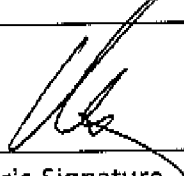
I/WE, Artem A. Oks, Per-Ake Larson, Srikumar Rangarajan, Michael James Zwilling, Jose A. Blakeley, and Hanumah Kodavalla ("ASSIGNOR"), have invented subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "COLUMNAR STORAGE OF A DATABASE INDEX" ("APPLICATION"), which:

- will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052, who are associated with customer number 69316, to insert here in parenthesis (Application No. \_\_\_\_\_, filed \_\_\_\_\_) this APPLICATION's Application No. and filing date, when known;
- was filed on 03/08/2010 and was given Application No. 12/719015;
- is filed concurrently herewith;

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"));

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, the 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	<u>2/25/10</u> _____ Date
Artem A. Oks _____ Printed Name in English	_____ Printed Name in Native Language (if

\_\_\_\_\_  
other than English)

_____ Inventor's Signature	_____ Date
<u>Per-Ake Larson</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

_____ Inventor's Signature	_____ Date
<u>Srikumar Rangarajan</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

_____ Inventor's Signature	_____ Date
<u>Michael James Zwilling</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

PATENT ASSIGNMENT

MS Docket No.: 328751.01

_____ Inventor's Signature	_____ Date
<u>Jose A. Blakeley</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

<u>Hanumantha R Kodavalla</u> Inventor's Signature	<u>March 3rd 2010</u> Date
<u>Hanumantha R Kodavalla</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

**PATENT ASSIGNMENT**

MS Docket No.: 328751.01

I/WE, Artem A. Oks, Per-Ake Larson, Srikumar Rangarajan, Michael James Zwilling, Jose A. Blakeley, and Hanumah Kodavalla ("ASSIGNOR"), have invented subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "COLUMNAR STORAGE OF A DATABASE INDEX" ("APPLICATION"), which:

- will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052, who are associated with customer number 69316, to insert here in parenthesis (Application No. \_\_\_\_\_, filed \_\_\_\_\_) this APPLICATION's Application No. and filing date, when known;
- was filed on 03/08/2010 and was given Application No. 12/719015;
- is filed concurrently herewith;

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"));

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, the 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	_____ Date
<u>Artem A. Oks</u> Printed Name in English	_____ Printed Name in Native Language (if

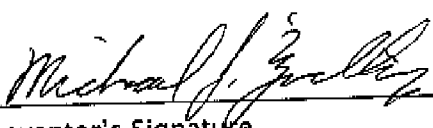
PATENT ASSIGNMENT

MS Docket No.: 328751.01

\_\_\_\_\_  
other than English)

_____ Inventor's Signature	_____ Date
<u>Per-Ake Larson</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

 _____ Inventor's Signature	<u>2/25/2010</u> _____ Date
<u>Srikumar Rangarajan</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

 _____ Inventor's Signature	<u>2/25/2010</u> _____ Date
<u>Michael James Zwilling</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

PATENT ASSIGNMENT

MS Docket No.: 328751.01

_____ Inventor's Signature	_____ Date
<u>Jose A. Blakeley</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

_____ Inventor's Signature	_____ Date
<u>Hanumah Kodavalla</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)



**PATENT ASSIGNMENT**

MS Docket No.: 328751.01

I/WE, Artem A. Oks, Per-Ake Larson, Srikumar Rangarajan, Michael James Zwilling, Jose A. Blakeley, and Hanumah Kodavalla ("ASSIGNOR"), have invented subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "COLUMNAR STORAGE OF A DATABASE INDEX" ("APPLICATION"), which:

- will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052, who are associated with customer number 69316, to insert here in parenthesis (Application No. \_\_\_\_\_, filed \_\_\_\_\_) this APPLICATION's Application No. and filing date, when known;
- was filed on 03/08/2010 and was given Application No. 12/719015;
- is filed concurrently herewith;

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"));

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, the 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	_____ Date
<u>Artem A. Oks</u> Printed Name in English	_____ Printed Name in Native Language (if

**PATENT ASSIGNMENT**

MS Docket No.: 328751.01

other than English)

<u><i>Per-Ake Larson</i></u>	<u>2/23/2010</u>
Inventor's Signature	Date
<u>Per-Ake Larson</u>	<u></u>
Printed Name in English	Printed Name in Native Language (if other than English)

<u></u>	<u></u>
Inventor's Signature	Date
<u>Srikumar Rangarajan</u>	<u></u>
Printed Name in English	Printed Name in Native Language (if other than English)

<u></u>	<u></u>
Inventor's Signature	Date
<u>Michael James Zwilling</u>	<u></u>
Printed Name in English	Printed Name in Native Language (if other than English)

**PATENT ASSIGNMENT**

MS Docket No.: 328751.01

_____ Inventor's Signature	_____ Date
<u>Jose A. Blakeley</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

_____ Inventor's Signature	_____ Date
<u>Hanumah Kodavalla</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

**PATENT ASSIGNMENT**

MS Docket No.: 328751.01

I/WE, Artem A. Oks, Per-Ake Larson, Srikumar Rangarajan, Michael James Zwilling, Jose A. Blakeley, and Hanumah Kodavalla ("ASSIGNOR"), have invented subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "COLUMNAR STORAGE OF A DATABASE INDEX" ("APPLICATION"), which:

- will be filed without this executed PATENT ASSIGNMENT. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representatives, of the Law and Corporate Affairs Department, Microsoft Corporation, One Microsoft Way, Redmond, Washington 98052, who are associated with customer number 69316, to insert here in parenthesis (Application No. \_\_\_\_\_, filed \_\_\_\_\_) this APPLICATION's Application No. and filing date, when known;
- was filed on 03/08/2010 and was given Application No. 12/719015;
- is filed concurrently herewith;

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"));

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, the 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	Date
Artem A. Oks	_____
Printed Name in English	Printed Name in Native Language (if

\_\_\_\_\_  
other than English)

_____ Inventor's Signature	_____ Date
<u>Per-Ake Larson</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

_____ Inventor's Signature	_____ Date
<u>Srikumar Rangarajan</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

_____ Inventor's Signature	_____ Date
<u>Michael James Zwilling</u> Printed Name in English	_____ Printed Name in Native Language (if other than English)

