

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

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>Richard A. Warren</td> <td>03/13/2013</td> </tr> <tr> <td>Sudarshan Raghunathan</td> <td>03/14/2013</td> </tr> <tr> <td>Adam P. Jenkins</td> <td>03/17/2013</td> </tr> </tbody> </table>		Name	Execution Date	Richard A. Warren	03/13/2013	Sudarshan Raghunathan	03/14/2013	Adam P. Jenkins	03/17/2013		
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RECEIVING PARTY DATA											
<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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PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13828981</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13828981						
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CORRESPONDENCE DATA											
Fax Number:	8013281707										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
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ATTORNEY DOCKET NUMBER:	13768.2282										
NAME OF SUBMITTER:	Gregory R. Lunt										
<p>Total Attachments: 6          source=Assignment#page1.tif</p>											

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I Richard A. Warren ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "PROVIDING DISTRIBUTED ARRAY CONTAINERS FOR PROGRAMMING OBJECTS" ("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 No. \_\_\_\_\_ by the following Office US - United States Patent and Trademark Office) this APPLICATION's Application No., filing date, and Office, when known;
- was filed on March 14, 2013 and was given Application No 13/828,981 by the following Office "US - United States Patent and Trademark 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	Office

PATENT ASSIGNMENT

MS Docket No.: 338582.01

OC Number: 13768.2282

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>Richard A. Warren</u>	<u>3/13/2013</u>
Inventor Signature	Date
<u>Richard A. Warren</u>	<u></u>
Printed Name in English	Printed Name in Native Language (if other than English)

I Sudarshan Raghunathan ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "PROVIDING DISTRIBUTED ARRAY CONTAINERS FOR PROGRAMMING OBJECTS" ("APPLICATION"), which:

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<u>R. Sudarshan</u>	<u>03/14/2013.</u>
Inventor Signature	Date
<u>Sudarshan Raghunathan</u>	
Printed Name in English	Printed Name in Native Language (if other than English)

I Adam P. Jenkins ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "PROVIDING DISTRIBUTED ARRAY CONTAINERS FOR PROGRAMMING OBJECTS" ("APPLICATION"), which:

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	<u>3/17/13</u>
Inventor Signature	Date
<u>Adam P. Jenkins</u>	
Printed Name in English	Printed Name in Native Language (if other than English)