505820280 12/13/2019

PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | | NEW ASSIGNMENT | | |
| NATURE OF CONVEYANCE: | | ASSIGNMENT | | |
| CONVEYING PARTY DA | TA | | | |
| | | | Name | Execution Date |
| ZILIU LI | | | | 12/10/2019 |
| JUNAID AHMED | | | | 12/13/2019 |
| ARNOLD OVERWIJK | | | | 12/10/2019 |
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| RECEIVING PARTY DA | | | | |
| Name: | | | T TECHNOLOGY LICENSING, LLC | , |
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| City: | | REDMOND | | |
| State/Country: | WASH | INGT | ON | |
| Postal Code: | 98052 | | | |
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| PROPERTY NUMBERS Property Type | lotal: 1 | | Number | |
| Application Number: | | 1671 | 16713555 | |
| | | 1071 | 3333 | |
| CORRESPONDENCE D | ΑΤΑ | | | |
| Fax Number: | | (425) | 936-7329 | |
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| Phone: | roviae | | hat is unsuccessful, it will be sen 707-9382 | |
| | | cket@microsoft.com | | |
| | | STOPHER OCHS | | |
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| Address Line 2: | PATENT GROUP DOCKETING DEPT | | | |
| Address Line 4: | REDMOND, WASHINGTON 98052 | | | |
| ATTORNEY DOCKET NUMBER: | | 407868-US-NP | | |
| NAME OF SUBMITTER: | | DAVID HUNTLEY | | |
| SIGNATURE: | | / David Huntley 40309 / | | |
| DATE SIGNED: | | 12/13/2019 | | |
| DATE SIGNED: | | | 12/13/2019 | |
| DATE SIGNED: Total Attachments: 6 | | | 12/13/2019 | |
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> PATENT REEL: 051277 FRAME: 0534

I <u>Ziliu U</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "Resource-Efficient Generation of Visual Lavout Information Associated with Network-Accessible Documents" ("APPLICATION"), which:

will be filed. ASSIGNOR hereby authorizes, and requests,
 ASSIGNEE'S legal representative, Microsoft Technology Licensing,
 LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S
 LEGAL REPRESENTATIVES), to insert here in parentheses (filed on December 13.2019 and given Application No. 16713555 by the following Office USPTO) this APPLICATION's Application No., filing date, and Office, when known;

No. ______ by the following Office "_____";

Microsoft Technology Licensing, LLC, a Washington limited liability company, 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, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, 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 |
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MS Docket No.: 407868-US-NP

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, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("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).

Date Inventor's Signature Ziliu Ll Printed Name in Nàtive Language Printed Name in English (if other than English)

I Junaid AHMED ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "Resource-Efficient Generation of Visual Layout Information Associated with Network-Accessible Documents" ("APPLICATION"), which:

will be filed. ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S legal representative, Microsoft Technology Licensing, LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S LEGAL REPRESENTATIVES), to insert here in parentheses (filed on <u>December 13, 2019</u> and given Application No. <u>16713555</u> by the following Office <u>USPTO</u>) this APPLICATION'S Application No., filing date, and Office, when known;

was filed on ______ and was given Application
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| Junail Almed | 12/13/2019 |
|-------------------------|---------------------------------|
| Inventor's Signature | Date |
| Junaid AHMED | |
| Printed Name in English | Printed Name in Native Language |
| | (if other than English) |

I <u>Arnold OVERWIJK</u> ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "<u>Resource-Efficient Generation of Visual Lavout Information</u> <u>Associated with Network-Accessible Documents</u>" ("APPLICATION"), which:

will be filed. ASSIGNOR hereby authorizes, and requests,
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| A. Quescum | {2/10/2019 |
|-------------------------|---------------------------------|
| Inventor's Signature | Date |
| Arnold OVERWIJK | |
| Printed Name in English | Printed Name in Native Language |
| | (if other than English) |