

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5516109

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| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT                      |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                          |
| <b>CONVEYING PARTY DATA</b>   |                                     |
|   |                                     |
| <b>Name</b>   | <b>Execution Date</b>               |
| RAVI THEJA YADA   | 05/08/2019                          |
| YAN WANG  | 05/08/2019                          |
| NIKITA ASTRAKHANTSEV  | 05/09/2019                          |
| ARUN SACHETI  | 05/09/2019                          |
| <b>RECEIVING PARTY DATA</b>   |                                     |
| <b>Name:</b>  | MICROSOFT TECHNOLOGY LICENSING, LLC |
| <b>Street Address:</b>  | ONE MICROSOFT WAY                   |
| <b>City:</b>  | REDMOND                             |
| <b>State/Country:</b>   | WASHINGTON                          |
| <b>Postal Code:</b>   | 98052                               |
| <b>PROPERTY NUMBERS Total: 1</b>  |                                     |
|   |                                     |
| <b>Property Type</b>  | <b>Number</b>                       |
| <b>Application Number:</b>  | 16408192                            |
| <b>CORRESPONDENCE DATA</b>  |                                     |
| <b>Fax Number:</b>  | (425)936-7329                       |
| <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>   | USDocket@microsoft.com              |
| <b>Correspondent Name:</b>  | CHRISTOPHER OCHS                    |
| <b>Address Line 1:</b>  | ONE MICROSOFT WAY                   |
| <b>Address Line 2:</b>  | PATENT GROUP DOCKETING DEPT         |
| <b>Address Line 4:</b>  | REDMOND, WASHINGTON 98052           |
| <b>ATTORNEY DOCKET NUMBER:</b>  | 406379-US-NP                        |
| <b>NAME OF SUBMITTER:</b>   | DAVID HUNTLEY                       |
| <b>SIGNATURE:</b>   | / David Huntley 40309 /             |
| <b>DATE SIGNED:</b>   | 05/09/2019                          |
| <b>Total Attachments: 8</b>   |                                     |
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source=406379-US-NP-Executed-Assignments#page8.tif

I Ravi Theja YADA (“ASSIGNOR”) am the original inventor or an original joint inventor of subject matter (“INVENTION”) disclosed and/or claimed in a patent application entitled “Techniques for Modifying a Query Image” (“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 May 9, 2019 and given Application No. 16408192 by the following Office USPTO) this APPLICATION’s Application No., filing date, and Office, when known;

was filed on \_\_\_\_\_ and was given Application 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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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).

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|---|---|
|  | 5/8/2019  |
| _____<br>Inventor's Signature   | _____<br>Date   |
| Ravi Theja YADA   |   |
| _____<br>Printed Name in English  | _____<br>Printed Name in Native Language<br>(if other than English) |

I Yan WANG (“ASSIGNOR”) am the original inventor or an original joint inventor of subject matter (“INVENTION”) disclosed and/or claimed in a patent application entitled “Techniques for Modifying a Query Image” (“APPLICATION”), which:

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|  | 05/08/2019  |
| _____<br>Inventor's Signature   | _____<br>Date   |
| Yan WANG  | 王言  |
| _____<br>Printed Name in English  | _____<br>Printed Name in Native Language<br>(if other than English) |

I Nikita ASTRAKHANTSEV ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "Techniques for Modifying a Query Image" ("APPLICATION"), which:

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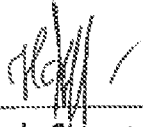
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|---|---|
|  | <i>May 09, 2019</i>   |
| _____<br>Inventor's Signature   | _____<br>Date   |
| Nikita ASTRAKHANTSEV  | <i>Никита Александрович Астраханцев</i>                             |
| _____<br>Printed Name in English  | _____<br>Printed Name in Native Language<br>(if other than English) |



I Arun SACHETI ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "Techniques for Modifying a Query Image" ("APPLICATION"), which:

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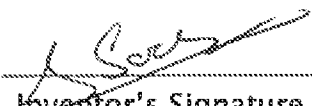
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|   |  |
|---|--|
| <br>Inventor's Signature | <u>05/09/19</u><br>Date  |
| Arun SACHETI<br>Printed Name in English   | <br>Printed Name in Native Language<br>(if other than English) |