504452141 07/11/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4498842

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------|----------------|
| BIN LI | 03/09/2016 |
| YOU ZHOU | 03/15/2016 |
| JIZHENG XU | 03/09/2016 |
| CHIH-LUNG LIN | 03/09/2016 |
| FENG WU | 03/09/2016 |

RECEIVING PARTY DATA

| Name: | MICROSOFT TECHNOLOGY LICENSING, LLC |
|-----------------|-------------------------------------|
| Street Address: | ONE MICROSOFT WAY |
| City: | REDMOND |
| State/Country: | WASHINGTON |
| Postal Code: | 98052 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------|--------------|
| PCT Number: | CN2014076446 |

CORRESPONDENCE DATA

Fax Number: (503)595-5301

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.

Phone: 503 595 5300

Email: iris.rasanen@klarquist.com

Correspondent Name: PATRICK M. BIBLE, KLARQUIST SPARKMAN LLP

Address Line 1: 121 SW SALMON STREET, SUITE 1600

Address Line 2: ONE WORLD TRADE CENTER
Address Line 4: PORTLAND, OREGON 97204

| ATTORNEY DOCKET NUMBER: | 3382-95207-02 |
|-------------------------|--------------------|
| NAME OF SUBMITTER: | PATRICK M. BIBLE |
| SIGNATURE: | /Patrick M. Bible/ |
| DATE SIGNED: | 07/11/2017 |

Total Attachments: 10

PATENT REEL: 042979 FRAME: 0297

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PATENT ASSIGNMENT

| subject matter ("INV | ENTION") disclosed and/or clai ISIONS FOR SAMPLE ADAPTIVE | tor or an original joint inventor imed in a patent application en OFFSET FILTERING" | | |
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| lega Micr REPF and Offic | l representatives, of Microsoft osoft Way, Redmond, Washing RESENTATIVES) to insert here in given Application No. | thorizes, and requests, ASSIGN Technology Licensing, LLC., Onton 98052 (ASSIGNEE'S LEGAL parentheses (filed on | ne , perty | |
| PCT | was filed on April 29, 2014, and was given Application No. PCT/CN2014/076446 by the State Intellectual Property Office of the People's Republic of China (RO/CN); | | | |
| behalf of itself and it desirous of acquiring right of priority, in the patents derived ther for the United States DERIVATIVES")); ASSIGNOR her to insert the Applica | ts successors and assigns ("AS g, the entire and exclusive righ he INVENTION and the APPLICA efrom, such as continuing app , its territories, and all foreign reby authorizes, and requests, | hington limited liability compa SIGNEE"), is entitled to, and is hts, title and interest, including ATION (and all other application dications, in whole or in part, in countries ("APPLICATION ASSIGNEE'S LEGAL REPRESENT, e into the following table for an | the ns and and | |
| 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).

| 12h L | March 9,2016 |
|-------------------------|-------------------------------------|
| Inventor's Signature | Date |
| | * ;=1' |
| Bin Li | A X K |
| Printed Name in English | Printed Name in Native Language (if |
| | other than English) |

PATENT ASSIGNMENT

| I, You Zhou ("ASSIGNOR"), | am the original inventor of | or an original joint inventor |
|---|---|--|
| of subject matter ("INVENTION") | disclosed and/or claimed | in a patent application |
| entitled "ENCODER-SIDE DECISION | NS FOR SAMPLE ADAPTIV | E OFFSET FILTERING" |
| ("APPLICATION"), which: | | |
| legal representation Microsoft Way, R REPRESENTATIVE and given Applic Office of the Peo | tives, of Microsoft Techno edmond, Washington 980 S) to insert here in parent ation No by th | 52 (ASSIGNEE'S LEGAL heses (filed on, ne State Intellectual Property O/CN)) this APPLICATION's |
| was filed on Ann | il 20, 2014, and was given | Annlication No |
| • | <u>il 29, 2014,</u> and was giver | • • |
| | • | tual Property Office of the |
| reopie's Republi | c of China (RO/CN); | |
| Microsoft Technology Lice | ensing, LLC, a Washington | $limited \ liability \ company, \ on$ |
| behalf of itself and its successor | s 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 INVENTIO | N and the APPLICATION (a | and all other applications and |
| patents derived therefrom, such | as continuing applications | s, in whole or in part,in and |
| for the United States, its territori | es, and all foreign countri | es ("APPLICATION |
| DERIVATIVES")); | | · |
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| ASSIGNOR hereby authorize | zes, and requests, ASSIGN | EE'S LEGAL REPRESENTATIVES |
| to insert the Application No., fili | • | |
| APPLICATION DERIVATIVES after | • | ie ronowing table for any |
| | they are known, | |
| Application No. | Filing Date | Office |
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MS Docker No. 1941 273 (1)

For good and valuable consideration, the receipt of which is helpfy acknowledged by the ASSICNOR, the ASSICNOR hereby sells, assigns and transfers to the ASSICNEE, ASSICNOR'S entire and exclusive rights, title and interest, including the right of phonix, 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).

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Inventor's Signature

You Zhou

Printed Name in English

3 15 20 6

Date

Printed Name in Native Language of other than English)

PATENT ASSIGNMENT

| of subject matter ("IN" | VENTION") disclosed and/or cl DE DECISIONS FOR SAMPLE AE | |
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| legal : Micro REPRE and g Office | representatives, of Microsoft T soft Way, Redmond, Washingto SENTATIVES) to insert here in iven Application No. | parentheses (filed on by the State Intellectual Property hina (RO/CN)) this APPLICATION's |
| PCT/C | led on <u>April 29, 2014,</u> and wa <u>N2014/076446</u> by the State I e's Republic of China (RO/CN); | ntellectual Property Office of the |
| behalf of itself and its desirous of acquiring, right of priority, in the patents derived theref for the United States, i DERIVATIVES")); ASSIGNOR herei to insert the Application | successors and assigns ("ASSI the entire and exclusive right: NVENTION and the APPLICAT rom, such as continuing appli- its territories, and all foreign c | s, title and interest, including the FION (and all other applications and cations, in whole or in part,in and |
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Inventor's Signature

Jizheng Xu

Printed Name in English

Man. 9, 2016

Date

Printed Name in Native Language (if

other than English)

PATENT ASSIGNMENT

| inventor of application | subject matter | ("INVENTION") disclosed DER-SIDE DECISIONS FOR | al inventor or an original jo and/or claimed in a patent SAMPLE ADAPTIVE OFFSE | |
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| | legal repre Microsoft \ REPRESENT and given Office of tl | sentatives, of Microsoft T Nay, Redmond, Washingt "ATIVES) to insert here in Application No | norizes, and requests, ASSI Fechnology Licensing, LLC. on 98052 (ASSIGNEE'S LEG parentheses (filed on by the State Intellectual hina (RO/CN)) this APPLICA fice, when known; | , One AL ——————————————————————————————————— |
| | PCT/CN20 | in <u>April 29, 2014,</u> and wa <u>14/076446</u> by the State epublic of China (RO/CN) | Intellectual Property Office | of the |
| behalf of it desirous of right of pri patents de for the Uni DERIVATIV ASSI to insert th | self and its succe f acquiring, the ority, in the INV rived therefrom, ted States, its te ES")); IGNOR hereby and the Application N | tessors and assigns ("ASS entire and exclusive righ ENTION and the APPLICA such as continuing appl erritories, and all foreign uthorizes, and requests, o., filing date, and Office | ington limited liability con IGNEE"), is entitled to, and ts, title and interest, includ TION (and all other applica ications, in whole or in par countries ("APPLICATION ASSIGNEE'S LEGAL REPRESE into the following table fo | is ling the tions and t,in and NTATIVES |
| Application | | Filing Date | Office | |
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Inventor's Signature

Chih-Lung Lin

Printed Name in English

Date

Printed Name in Native Language (if

other than English)

PATENT ASSIGNMENT

| = | _ | r an original joint inventor of |
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| subject matter ("INVENTION") dis | · | • |
| "ENCODER-SIDE DECISIONS FOR | SAMPLE ADAPTIVE OFFSET | FILTERING" |
| ("APPLICATION"), which: | | |
| legal representa Microsoft Way, R REPRESENTATIVE and given Applic Office of the Pec | tives, of Microsoft Techno ledmond, Washington 980 ES) to insert here in parent cation No by th | theses (filed on, ne State Intellectual Property O/CN)) this APPLICATION's |
| PCT/CN2014/07 | il 29, 2014 and was given <u>'6446</u> by the State Intellec c of China (RO/CN); | Application No. tual Property Office of the |
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| behalf of itself and its successor desirous of acquiring, the entire right of priority, in the INVENTIC patents derived therefrom, such for the United States, its territori DERIVATIVES")); | s and assigns ("ASSIGNEE" and exclusive rights, title N and the APPLICATION (a as continuing applications | and interest, including the and all other applications and s, in whole or in part,in and |
| ASSIGNOR hereby authori | zes, and requests, ASSIGN | EE'S LEGAL REPRESENTATIVES |
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| hnfz | 03/09/2016 |
|-------------------------|-------------------------------------|
| Inventor's Signature | Date |
| Feng Wu | |
| Printed Name in English | Printed Name in Native Language (if |
| | other than English) |