504461451 07/18/2017

PATENT ASSIGNMENT COVER SHEET

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

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------------|----------------|
| NATHAN EDWARD TENNY | 05/23/2017 |
| XIAOYAN DUAN | 07/17/2017 |
| HUI JIN | 05/24/2017 |
| GUORONG LI | 05/26/2017 |
| GUOWEI OUYANG | 05/24/2017 |
| YUNSONG YANG | 05/23/2017 |

RECEIVING PARTY DATA

| Name: | Futurewei Technologies, Inc. | |
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| Internal Address: | Suite 175 | |
| City: | Plano | |
| State/Country: | TEXAS | |
| Postal Code: | 75024 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15605360 |

CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | HW 84991106US02 |
|-------------------------|-------------------|
| NAME OF SUBMITTER: | MARANDA BRALLEY |
| SIGNATURE: | /Maranda Bralley/ |
| DATE SIGNED: | 07/18/2017 |

504461451 PATENT REEL: 043032 FRAME: 0377

Total Attachments: 5 source=HW 84991106US02 Assignment#page1.tif source=HW 84991106US02 Assignment#page2.tif source=HW 84991106US02 Assignment#page3.tif

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PATENT REEL: 043032 FRAME: 0378

WHEREAS, I/We, the undersigned inventor(s) (or one of the undersigned joint inventors), of residence as listed below, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, Futurewei Technologies, Inc. ("Assignee"), a corporation organized and existing under the laws of Texas, with its principal office at 5340 Legacy Drive, Suite 175, Plano, TX 75024 is desirous of acquiring my/our entire right, title and interest in the said invention, and to the said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/we will assign, and hereby assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns the full and exclusive right, title and interest in and to the invention in the United States and every foreign country and the entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisional, reissues, reexaminations, National Phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the invention, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon, and I/we do hereby authorize and request the Commissioner for Patents to issue U.S. patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the Assignee agreeably with the terms of this assignment document.

I also hereby agree to sell and to assign, and sell and assign to Assignee, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including, but not limited to, the right to file applications and obtain patents under the terms of the International Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to Assignee, or its successors, assigns, and legal representative, any facts know to me respecting said invention or the file history thereof, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid such Futurewei, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

Futurewei Technologies, Inc. Patent Reference No. HW 84991106US02 Page 1 of 3

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

| Title of Invention | System and Method for Paging in a Communications System | |
|--------------------------|---|--------------|
| | Appl. No. | Filing Date: |
| Signature of Inventor | Made Elin Co | |
| Inventor Name | Nathan Edward Tenny | |
| Date | 23 MAY 2017 | |
| Residence | Poway, CA | |
| (City/State) | | |
| Signature of | | |
| Inventor | | |
| Inventor Name | Xiaoyan Duan | |
| Date | | |
| Residence | Shenzhen, CN | |
| (City/State) | | |
| Signature of | | |
| Inventor | | |
| Inventor Name | Hui Jin | |
| Date | | |
| Residence | Shenzhen, CN | |
| (City/State) | | |
| Signature of | | |
| Inventor | | |
| Inventor Name | Gnorong Li | |
| Date | | |
| Residence | Bejing, CN | |
| (City/State) | | |
| Signature of | | |
| Inventor | | |
| Inventor Name | Guowei Ouyang | |
| Date | | |
| Residence | Bejing, CN | |
| (City/State) | | |

Futurewei Technologies, Inc. Patent Reference No. HW 84991106US02

Page 2 of 3

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

| Title of Invention | System and Method for Paging in a Communications System | |
|--------------------------|--|-------------------------------------|
| | Appl. No. | Filing Date: |
| Signature of Inventor | | · · · · · · · · · · · · · · · · · · |
| Inventor Name | Nathan Edward Tenny | |
| Date | | |
| Residence | Poway, CA | |
| (City/State) | , , | |
| Signature of | | |
| Inventor | | |
| Inventor Name | Xiaoyan Duan | |
| Date | | |
| Residence | Shenzhen, CN | |
| (City/State) | | |
| Signature of | 1, 7. | |
| Inventor | Hui Jin | |
| Inventor Name | Hui Jin | |
| Date | May 24 2017 | |
| Residence | Shenzhen, CN | |
| (City/State) | | |
| Signature of | Guarana 12 | |
| Inventor | . Quorong Li | |
| Inventor Name | Guorong Li | |
| Date | May 26. 2017 | • |
| Residence | Bejing, CN | |
| (City/State) | | |
| Signature of | C | |
| Inventor | Growei Guyang | |
| Inventor Name | Guowei Ouyang | |
| Date | May 24- 2017 | |
| Residence | Bejing, CN | |
| (City/State) | <i>f</i> | |

Futurewei Technologies, Inc. Patent Reference No. HW 84991106US02

Page 2 of 3

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

| Title of Invention | System and Method for Paging in a Communications System | | |
|--------------------------|---|--------------|--|
| | Appl. No. | Filing Date: | |
| Signature of Inventor | | | |
| Inventor Name | Nathan Edward Tenny | | |
| Date | | | |
| Residence | Poway, CA | | |
| (City/State) | **· | | |
| Signature of Inventor | Xiaoyan Duan | , | |
| Inventor Name | Xiaoyan Duan | | |
| Date | July 17, 2017 | | |
| Residence | Shenzhen, ČN | | |
| (City/State) | · | | |
| Signature of | 7 | | |
| Inventor | Hui Jin | | |
| Inventor Name | Hui Jin | | |
| Date | May 24 2017 | | |
| Residence | Shenzhen, CN | | |
| (City/State) | į. | | |
| . Signature of | | · | |
| Inventor | | | |
| Inventor Name | Guorong Li | | |
| Date | | | |
| Residence | Bejing, CN | | |
| (City/State) | | | |
| Signature of | | | |
| Inventor | Chowei Guyang | | |
| Inventor Name | Guowei Ouyang | | |
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Futurewei Technologies, Inc. Patent Reference No. HW 84991106US02

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PATENT REEL: 043032 FRAME: 0382

| Title of Invention | System and Method for Paging in a Communications System | |
|-----------------------|---|--------------|
| | Appl. No. | Filing Date: |
| Signature of Inventor | 47 H | |
| Inventor Name | Yunsong Yang | |
| Date | 5/23//) | |
| Residence | Śan Dieģo, ĆA | |
| (City/State) | | |

Futurewei Technologies, Inc. Patent Reference No. HW 84991106US02

RECORDED: 07/18/2017

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PATENT REEL: 043032 FRAME: 0383