# 506350942 11/12/2020

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6397697

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

## **CONVEYING PARTY DATA**

| Name          | Execution Date |
|---------------|----------------|
| JINGJING CHEN | 10/26/2020     |
| XIAORAN ZHANG | 10/26/2020     |
| XUEYING HOU   | 10/26/2020     |
| NAN LI        | 10/26/2020     |

### **RECEIVING PARTY DATA**

| Name:             | CHINA MOBILE COMMUNICATION CO., LTD RESEARCH INSTITUTE |
|-------------------|--|
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| Internal Address: | XICHENG DISTRICT                                       |
| City:             | BEIJING  |
| State/Country:    | CHINA  |
| Postal Code:      | 100053   |
| Name:             | CHINA MOBILE COMMUNICATIONS GROUP CO.,LTD.             |
| Street Address:   | 29, JINRONG AVE.                                       |
| Internal Address: | XICHENG DISTRICT                                       |
| City:             | BEIJING  |
| State/Country:    | CHINA  |
| Postal Code:      | 100032   |

#### **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |  |
|---------------------|----------|--|
| Application Number: | 17054867 |  |

## **CORRESPONDENCE DATA**

Fax Number:

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.

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Email: ptomail@priceheneveld.com
Correspondent Name: PRICE HENEVELD LLP
Address Line 1: 695 KENMOOR SE

Address Line 2: P O BOX 2567

Address Line 4: GRAND RAPIDS, MICHIGAN 49501

| ATTORNEY DOCKET NUMBER:  | DRA007 P331  |
|--------------------------|--|
| NAME OF SUBMITTER:       | AARON J. WONG  |
| SIGNATURE:               | /Aaron J. Wong/  |
| DATE SIGNED:             | 11/12/2020   |
|                          | This document serves as an Oath/Declaration (37 CFR 1.63). |
| Total Attachments: 8     |  |
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# COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

| Title of<br>Invention          | INFORMATION REPORTING METHOD, DATA TRANSMISSION METHOD, USER EQUIPMENT AND NETWORK SIDE DEVICE  |  |  |
|--------------------------------|---|--|--|
| As a below                     | As a below named inventor, I hereby declare that:   |  |  |
| This decla                     | ration  |  |  |
| is directed                    | to:   |  |  |
| The above-i                    | United States application or PCT international application numberfiled ondentified application was made or authorized to be made by me.                                   |  |  |
| I believe tha<br>in the applic | it I am the original inventor or an original joint inventor of a claimed invention ation.   |  |  |
|                                | tnowledge that any willful false statement made in this declaration is under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) th.                         |  |  |
| parentheses                    | by authorize and request my attorney or representative to insert here in (patent Application number, filed) the filing lication number of said US application when known. |  |  |

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, each undersigned inventor (hereinafter referred to as "ASSIGNOR"), do hereby:

SELL, ASSIGN AND TRANSFER to CHINA MOBILE COMMUNICATION CO., LTD RESEARCH INSTITUTE, having a place of business at 32 Xuanwumen West Street, Xicheng District, Beijing, China, and China Mobile Communications Group Co.,Ltd., having a place of business at 29, Jinrong Ave., Xicheng District, Beijing 100032, CHINA (each hereinafter referred to as "ASSIGNEE") the entire right, title and interest for the United States and all foreign countries in and to any and all inventions which are disclosed in the above-identified application for United States Letters Patent, which has been executed by the undersigned concurrently herewith, which is a national phase filing of PCT/CN2019/081871 filed on April 9, 2019; which in turn claims priority to CN201810474321.3 filed on May 17, 2018; which in turn claims priority to CN201810896769.4 filed on August 8, 2018; such applications and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such inventions; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

-

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such inventions; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such inventions and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such inventions in the Assignee, and for securing, maintaining and enforcing proper patent protection for such inventions;

TO BE BINDING on the heirs; assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

The assignment of said invention is effective as of the earlier of (1) the date of execution shown below or (2) the filing date of the first filed of said patent applications.

#### STATEMENTS

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent Office all information known to me to be material to patentability as defined in 37 C.F.R. 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part.

| ~~ |  |
|----|--|
|    | LEGAL NAME OF INVENTOR                   |
|    | Inventor: Jingjing CHEN Date: 26/19/2020 |
|    | Signature: Jugue CHEV                    |
|    | A377                                     |

# COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

| Title of Invention  |  |  |
|---|--|--|
| As a below named inventor, I hereby declare that:   |  |  |
| This declar   | ration   |  |
| is directed to:   |  |  |
|   | United States application or PCT international application numberfiled on  dentified application was made or authorized to be made by me.                                  |  |
| believe that I am the original inventor or an original joint inventor of a claimed invention in the application.  |  |  |
| I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. |  |  |
| parentheses   | by authorize and request my attorney or representative to insert here in (patent Application number, filed) the filing olication number of said US application when known. |  |

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WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

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| **** |   |
|------|---|
|      | LEGAL NAME OF INVENTOR                    |
|      | Inventor: Xiaoran ZHANG Date: 2-6/10/2020 |
|      | Signature: Xiaoyan ZHANG                  |

# COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

| Title of<br>Invention          | INFORMATION REPORTING METHOD, DATA TRANSMISSION METHOD, USER EQUIPMENT AND NETWORK SIDE DEVICE   |
|--------------------------------|--|
| As a below                     | named inventor, I hereby declare that:   |
| This decla                     | ration   |
| is directed                    | to: The attached application, or   |
| The above-i                    | United States application or PCT international application numberfiled ondentified application was made or authorized to be made by me.                                  |
| I believe tha<br>in the applic | It I am the original inventor or an original joint inventor of a claimed invention ation.  |
|                                | nowledge that any willful false statement made in this declaration is under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) th.                         |
| parentheses                    | y authorize and request my attorney or representative to insert here in (patent Application number, filed) the filing dication number of said US application when known. |

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WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

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| LEGAL NAME OF INVENTOR                 |
|--|
| Inventor: Xueying HOU Date: 20/10/2020 |
| Signature: Xueyîng HOU                 |

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# COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

|   | Title of<br>Invention  | INFORMATION REPORTING METHOD, DATA TRANSMISSION METHOD, USER EQUIPMENT AND NETWORK SIDE DEVICE   |  |
|---|--|--|--|
| ***********                                   | As a below   | named inventor, I hereby declare that:   |  |
| This declaration  The attached application or |  | The attached application or  |  |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~       | is directed  | United States application or PCT international application numberfiled on  |  |
| -   | The above-i  | dentified application was made or authorized to be made by me.   |  |
|   | believe that I am the original inventor or an original joint inventor of a claimed invention in the application. |  |  |
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|   |  | y authorize and request my attorney or representative to insert here in (patent Application number, filed) the filing                            |  |

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| LEGAL NAME OF I            |      |           | *************************************** | *************************************** | *************************************** |
|----------------------------|------|-----------|---|---|---|
| Inventor: <u>Nan LI</u> Da | ate: | Jula. 10. | 24                                      |   |   |
| Signature:/\/              |      |           |   | *************************************** | *************************************** |

PATENT REEL: 054347 FRAME: 0529

**RECORDED: 11/12/2020**