## 505380353 03/18/2019

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5427146

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
ZHIYU YAN	03/20/2012
YANG LI	03/20/2012
LEI WAN	03/20/2012
SHA MA	03/20/2012
XIAOTAO REN	03/20/2012
CHAOJUN LI	03/20/2012

### **RECEIVING PARTY DATA**

Name:	Huawei Technologies Co., Ltd.
Street Address:	Huawei Administration Building
Internal Address:	Bantian, Longgang District
City:	Shenzhen, Guangdong
State/Country:	CHINA
Postal Code:	518129

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

Property Type	Number
Application Number:	15852507

### **CORRESPONDENCE DATA**

**Fax Number:** (312)616-5700

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:** (312) 616-5600

Email: assignments@leydig.com
Correspondent Name: LEYDIG, VOIT & MAYER, LTD.

Address Line 1: TWO PRUDENTIAL PLAZA, SUITE 4900

Address Line 2: 180 NORTH STETSON AVENUE Address Line 4: CHICAGO, ILLINOIS 60601-6731

ATTORNEY DOCKET NUMBER:	HW736649
NAME OF SUBMITTER:	MARALEA ACHACOSO
SIGNATURE:	/Maralea Achacoso/
DATE SIGNED:	03/18/2019

505380353 PATENT REEL: 048626 FRAME: 0225

# Total Attachments: 6 source=ParentAssignment#page1.tif source=ParentAssignment#page2.tif source=ParentAssignment#page3.tif source=ParentAssignment#page4.tif source=ParentAssignment#page5.tif source=ParentAssignment#page6.tif

PATENT REEL: 048626 FRAME: 0226

Attorney Docket No. Client Reference No. 81360621US05

### ASSIGNMENT

## WHEREAS, WE,

Zhiyu YAN Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Lei WAN
Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R. CHINA; and

Xiaotao REN Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA: and Yang LI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Sha MA Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Chaojun LI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA;

have invented and own a certain invention entitled:
Method for Sending and Receiving Control Information, Apparatus and Communication System
for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on \_\_\_\_\_\_, under U.S. Application No. \_\_\_\_\_ and

WHEREAS, HUAWEI TECHNOLOGIES CO., LTD., of Huawei Administration Building, Bantian, Longgang District, Shenzhen, 518129, Guangdong, P.R. China, hereinafter referred to as Assignee, is desirous of acquiring the entire domestic and foreign right, title, and interest in and under the invention described in the patent application.

Now, Therefore, for good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, we assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns the full and exclusive rights in and to the invention in the U.S. 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, divisionals, 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 we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

WE HEREBY AUTHORIZE the Assignee to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

WE DO HEREBY COVENANT and agree with the Assignee that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set

REEL: 028926 FRAME: 0227

In re Appln. of Yan e	et al.
Attorney Docket No.	***************************************

consideration, but at the expense of the Assignee, execute such additional assignments and other writings and do such additional acts as the Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries on the invention, and in enforcing any rights or chooses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

IN WITNESS WHEREOF, we have hereunder set our hands on the dates shown below.

Date March 20, 2012	Zhiyu YAN	
Date March 20, 20/2	Zhiyu YAN  Zuomin Wu Witness	
Date March 20,2012	Witness GUAN	*. *
Date March 20, 2012	Yang LI	-
Date March 20, 2012	Zuomin Wu. Witness	
Date Morch 20, 2012	Lei GUAN Witness	
Date March 20. 2012	/ DIAMAI	Ž.
Date March 20, 2012	Lei WAN	
Date March 20, 20/2	Witness Lei GUAN	; ; ;
	Witness	: :

	And the contract of the contra
Date	The second of the second secon
	Sha MA
Date	Witness
Date	
	Witness
Date	
	Xiaotao REN
Date	Witness
Date	
	Witness
	The state of the s
Date	
Dota	Chaojun LI
Date	Witness
Date	
	Witness

In re Appln. of Yan et al. Attorney Docket No.

> PATENT REEL: 028026 FRAME: 0229

Attorney Docket No. Client Reference No. 81360621US05

# ASSIGNMENT

# WHEREAS, WE,

Zhiyu YAN Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Lei WAN
Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R. CHINA; and

Xiaotao REN Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Yang LI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Sha MA Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Chaojun LI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA;

have invented and own a certain invention entitled:
Method for Sending and Receiving Control Information, Apparatus and
Communication System
for which invention we have executed an application (provisional or non-provisional) for a U.S.
patent, which was filed on\_\_\_\_\_\_, under U.S. Application No.\_\_\_\_\_and

WHEREAS, HUAWEI TECHNOLOGIES CO., LTD., of Huawei Administration Building, Bantian, Longgang District, Shenzhen, 518129, Guangdong, P.R. China, hereinafter referred to as Assignee, is desirous of acquiring the entire domestic and foreign right, title, and interest in and under the invention described in the patent application.

Now, Therefore, for good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, we assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns the full and exclusive rights in and to the invention in the U.S. 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, divisionals, 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 we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

WE HEREBY AUTHORIZE the Assignee to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

WE DO HEREBY COVENANT and agree with the Assignee that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment element set

REEL: 028926 FRAME: 0230

In re Appln.	of Yan et al.
Attorney Do	

forth herein, and that we will at any time upon request, without further or additional consideration, but at the expense of the Assignee, execute such additional assignments and other writings and do such additional acts as the Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries on the invention, and in enforcing any rights or chooses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

IN WITNESS WHEREOF, we have hereunder set our hands on the dates shown below.

Date		
	Zhiyu YAN	
Date		
	Witness	
Date		
	Witness	
	Maries States Service Record States States and Assessment States Commission States Sta	
Date		
	Yang LI	Alle Control of the C
Date		
	Witness	9-18-18-18-18-18-18-18-18-18-18-18-18-18-
Date		
	Witness	and the second s
	CONTROL OF THE PROPERTY OF THE	
Date		
	Lei WAN	
Date	and the second s	
	Witness	Manual Control of the
Date		
	Witness	

PATENT REEL: 028026 FRAME: 0231

Date March 20, 20/2  Date March 20, 20/2.  Date March 20, 20/2.	Sha MA Sha MA  Sha MA  Zuomin Wu Witness  Lei GUAN  Witness	
Date March 20, 2012  Date March 20, 2012  Date March 20, 2012	Xiaotao REN  Xiaotao REN  Zuomin Wu.  Witness  Lei GUAN  Witness	
Date March 20, 2012  Date March 20, 2012  Date March 20, 2012	Chaojun LI Chaojun LI Zuomin Wu Witness Lev GVAN Witness	