PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
XIAOLEI TIE	03/23/2018
YINGHUI YU	03/22/2018
LEI LIU	03/19/2018
STEVEN JAMES WENHAM	03/23/2018
ODILE ROLLINGER	03/20/2018

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:	15829431

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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.

Email: apsi@fr.com

Correspondent Name: FISH & RICHARDSON P.C.

Address Line 1: P.O. BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

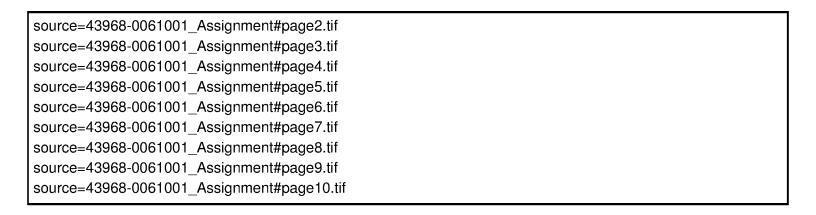
ATTORNEY DOCKET NUMBER:	43968-0061001
NAME OF SUBMITTER:	SUSAN C. JOHNSON
SIGNATURE:	/Susan C. Johnson/
DATE SIGNED:	04/04/2018

Total Attachments: 10

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PATENT REEL: 045433 FRAME: 0867

504852150



PATENT REEL: 045433 FRAME: 0868

WHEREAS, WE,

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

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

Odile Rollinger Unit 302, Cambridge Science Park, Milton Road, Cambridge, CB4 0WG, UK Yinghui Yu Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA: and

Steven James Wenham Unit 302, Cambridge Science Park, Milton Road, Cambridge, CB4 0WG, UK; and

have invented and own a certain invention entitled:

CONTROL INFORMATION SENDING METHOD, CONTROL INFORMATION DETECTION METHOD, BASE STATION, AND USER EQUIPMENT

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2017-12-01, under U.S. Application No. 15829431 and

WHEREAS, HUAWEI TECHNOLOGIES CO.,LTD., 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.

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

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.

Date Maych 23, 2018	Xiavlei TIE Xiavlei Tie	
	Xiaolei Tie	
Date	77. 1 . 77	
	Yinghui Yu	
Date	T	
	Lei Liu	
Date		
	Steven James Wenham	
Date		
	Odile Rollinger	

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Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R.CHINA; and
Odile Rollinger
Unit 302, Cambridge Science

Unit 302, Cambridge Science Park, Milton Road, Cambridge,

CB4 0WG, UK

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Date	Xiaolei Tie
Date May 22, 2018	Yinghui Yu Yinghui Yu
Date	Lei Liu
Date	Steven James Wenham
Date	Odile Rollinger

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Date	
	Xiaolei Tie
Date	
	Yinghui Yu
Date_March 19, 2018	Lei Liu
	Lei Liu
Date	
	Steven James Wenham
Date	
	Odile Rollinger

WHEREAS, WE,

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

Lei Liu
Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R.CHINA; and
Odile Rollinger
Unit 302, Cambridge Science

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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.

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Date	
	Xiaolei Tie
Date	Yinghui Yu
re «	
Date	Lei Liu
Date 23-MAK-14	Steven James Wenham
	Steven James Weiniam
Date	Odile Rollinger

Attorney Docket No. 43968-0061001 Client Reference No. 84568042US04

ASSIGNMENT

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

Lei Liu
Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R.CHINA; and
Odile Rollinger
Unit 302, Cambridge Science

Odile Rollinger Unit 302, Cambridge Science Park, Milton Road, Cambridge, CB4 0WG, UK Yinghui Yu Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA: and

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

Date	
	Xiaolei Tie
Date	
	Yinghui Yu
Date	
	Lei Liu
Date	Steven James Wenham
Date 20 March 2018	Allencer.
	Odile Rollinger

PATENT REEL: 045433 FRAME: 0878