#### 10/12/2015 503519345

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT3565971

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

# **CONVEYING PARTY DATA**

Name	Execution Date
JUN ZHAO	09/18/2015
BIAO QI	09/18/2015
XISHE LIU	09/18/2015
JINLIN ZHOU	09/22/2015
QI LI	09/23/2015
LIBING ZHOU	10/08/2015

# **RECEIVING PARTY DATA**

Name:	HUAWEI TECHNOLOGIES CO., LTD.
Street Address:	HUAWEI ADMINISTRATION BUILDING, BANTIAN
Internal Address:	LONGGANG DISTRICT,
City:	SHENZHEN, 518129, GUANGDONG, P.R.
State/Country:	CHINA

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14880919

# **CORRESPONDENCE DATA**

Fax Number: (972)628-3616

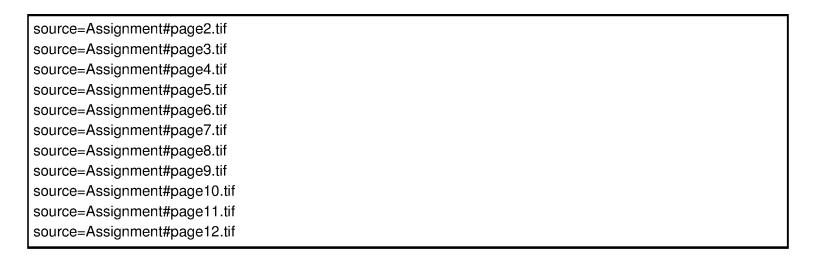
Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 972 628 3600

Email: patents@munckwilson.com DOCKET CLERK/HTCL **Correspondent Name:** Address Line 1: P.O. DRAWER 800889 Address Line 4: DALLAS, TEXAS 75380

NAME OF SUBMITTER:	ROBERT D. MCCUTCHEON	
SIGNATURE:	/robert d. mccutcheon/	
DATE SIGNED:	10/12/2015	

**Total Attachments: 12** source=Assignment#page1.tif



#### ASSIGNMENT

# WHEREAS, WE,

Jun ZHAO Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Biao QI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Xishe LIU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Jinlin ZHOU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Qi LI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Libing ZHOU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA;

have invented and own a certain invention entitled:
METHOD, APPARATUS AND SYSTEM FOR DETECTING OPTICAL NETWORKCORSS
REFERENCE
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 Noand

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 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 Sep 18, 2015	Jun ZHAO
Date	Biao QI
Date	Xishe LIU
Date	Jinlin ZHOU
Date	Qi LI
Date	Libing ZHOU

# **ASSIGNMENT**

# WHEREAS, WE,

Jun ZHAO Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Biao QI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Xishe LIU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Jinlin ZHOU
Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R. CHINA; and

Qi LI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Libing ZHOU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA;

have invented and own a certain invention entitled:
METHOD, APPARATUS AND SYSTEM FOR DETECTING OPTICAL NETWORKCORSS
REFERENCE
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

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In re Appln. of ZHAO et al. Attorney Docket No. \_\_\_\_\_

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Date	
	Jun ZHAO
Date_Sep. 18th. 2015	Biao Qi Biao QI
	Biao QI
Date	
	Xishe LIU
Date	
	Jinlin ZHOU
Date	O' I T
	Qi LI
Date	T. I. CATTOTA
	Libing ZHOU

#### ASSIGNMENT

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Jun ZHAO Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Biao QI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Xishe LIU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Jinlin ZHOU
Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R. CHINA; and

Qi LI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Libing ZHOU
Huawei Administration Building
Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R. CHINA;

have invented and own a certain invention entitled:	
METHOD, APPARATUS AND SYSTEM FOR DETECTING OPTICAL NETV	WORKCORSS
REFERENCE	
for which invention we have executed an application (provisional or non-provision	
patent, which was filed on, under U.S. Application Noand	d

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.

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Date	Jun ZHAO
Date	Biao QI
Date	Xishe Liu Xishe LIU
Date	Jinlin ZHOU
Date	Qi LI
Date	Libing ZHOU

# **ASSIGNMENT**

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Xishe LIU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Jinlin ZHOU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Qi LI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Libing ZHOU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA;

have invented and own a certain invention entitled:

METHOD, APPARATUS AND SYSTEM FOR DETECTING OPTICAL NETWORKCORSS REFERENCE
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.

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Date	
	Jun ZHAO
Date	
	Biao QI
Date	
	Xishe LIU
Date Sep, 22nd, 2015	Jinlin ZHOV
	Jinlin ZHOU
Doto	
Date	Qi LI
D. 4	
Date	Libing ZHOU

# ASSIGNMENT

# WHEREAS, WE,

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Bantian, Longgang District
Shenzhen, 518129, Guangdong
P.R. CHINA; and

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Huawei Administration Building
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Shenzhen, 518129, Guangdong
P.R. CHINA;

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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

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Attorney Docket No.				

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Date	Jun ZHAO
Date	Biao QI
Date	Xishe LIU
Date	Jinlin ZHOU
Date <u>SOP.23</u> , 2015	Qi Li
Date	Libing ZHOU

#### ASSIGNMENT

Biao OI

### WHEREAS, WE,

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

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

Xishe LIU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Jinlin ZHOU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and

Qi LI Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA; and Libing ZHOU Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R. CHINA;

have invented and own a certain invention entitled:
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Date	
	Jun ZHAO
Date	
	Biao QI
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Date	Xishe LIU
Date	
Date	Jinlin ZHOU
Data	
Date	Qi LI
Date Oct. 8, 2015	Librif Shou
	Libing ZHOU