# PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4957635

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

# **CONVEYING PARTY DATA**

Name	Execution Date
ZHAO ZHAO	11/16/2017
MALTE SCHELLMANN	11/16/2017
TAO DING	05/10/2018

# **RECEIVING PARTY DATA**

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City:	DUESSELDORF	
State/Country:	GERMANY	
Postal Code:	40549	

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15627118

# CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	HW728935	
NAME OF SUBMITTER:	LEANNA BULTEMA	
SIGNATURE:	/Leanna Bultema/	
DATE SIGNED:	05/11/2018	

### **Total Attachments: 4**

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> **PATENT REEL: 045779 FRAME: 0464**

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PATENT REEL: 045779 FRAME: 0465

#### ASSIGNMENT

## WHEREAS, WE,

Zhao Zhao Huawei Technologies Deutschland GmbH, Riesstr. 25, 80992 Munich, Germany; and

Tao Ding Huawei Administration Building, Bantian, Longgang District, Shenzhen, Guangdong 518129, P. R. China :and

Malte Schellmann Huawei Technologies Deutschland GmbH, Riesstr. 25, 80992 Munich, Germany

have invented and own a certain invention entitled:

ALAMOUTI MAPPING FOR USE IN REAL FIELD ORTHOGONAL FBMC MODULATION SYSTEMS

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2017-06-19 under U.S. Application No. 15627118 and

WHEREAS, Huawei Technologies Duesseldorf GmbH, Hansaallee 205, 40549 Duesseldorf, Germany, 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

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In re Appln. of Zhao et al. Attorney Docket No. HW728935

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 /Vov 16 2017	Zhao Zhao
Date	
Date For 16 . 2017	Tao Ding
	Malte Schellmann

#### ASSIGNMENT

# WHEREAS, WE,

Zhao Zhao Huawei Technologies Deutschland GmbH, Riesstr. 25, 80992 Munich, Germany ;and Tao Ding Huawei Administration Building, Bantian, Longgang District, Shenzhen, Guangdong 518129, P. R. China and

Malte Schellmann Huawei Technologies Deutschland GmbH, Riesstr. 25, 80992 Munich, Germany

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WHEREAS, Huawei Technologies Duesseldorf GmbH, Hansaallee 205, 40549 Duesseldorf, Germany, 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 Assignce that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set

PATENT REEL: 045779 FRAME: 0468 In re Appln. of Zhao et al. Attorney Docket No. HW728935

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	
	Zhao Zhao
Date MAY, 10.2018	-andy
	Tao Ding
Date	
	Maite Schellmann