504693560 12/18/2017

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
MARIO COSTA	11/23/2017
PHILIP GINZBOORG	11/23/2017
GUNNAR HEDBY	11/27/2017

# **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:	15706154

# **CORRESPONDENCE DATA**

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

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**Phone:** 312-616-5600

Email: assignments@leydig.com
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ATTORNEY DOCKET NUMBER:	HW730893
NAME OF SUBMITTER:	LEANNA BULTEMA
SIGNATURE:	/Leanna Bultema/
DATE SIGNED:	12/18/2017

**Total Attachments: 6** 

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PATENT 504693560 REEL: 044426 FRAME: 0513



PATENT REEL: 044426 FRAME: 0514

PATENT
Attorney Docket No. HW730893
Client Reference No. 84374363US04

#### ASSIGNMENT

## WHEREAS, WE,

Mario Costa Itämerenkatu 9, 2nd floor ,00180, Helsinki, Finland; and Philip Ginzboorg Itämerenkatu 9, 2nd floor ,00180, Helsinki, Finland; and

Gunnar Hedby Huawei Technologies Sweden AB, Skalholtsgatan 9, S-164 40 Kista, Sweden;

have invented and own a certain invention entitled:

COMMUNICATION DEVICE, ACCESS NODE AND METHODS THEREOF

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2017-09-15, under U.S. Application No. 15706154 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.

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

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In re Appln. of Costa et al. Attorney Docket No. HW730893

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 13.11. 2017	Mario Costa
Date	Philip Ginzboorg
Date	Gunnar Hedby

#### ASSIGNMENT

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In re Appln. of Costa et al. Attorney Docket No. <u>HW7308</u>93

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	
· · · · · · · · · · · · · · · · · · ·	Mario Costa
Date 23 Nov. 2019	Philip ginzbooks
	Philip Ginzboorg
Date	¥
	Gunnar Hedby

Attorney Docket No. <u>HW73089</u>3 Client Reference No. 84374363US04

#### ASSIGNMENT

#### WHEREAS, WE,

Mario Costa Philip Ginzboorg
Itämerenkatu 9, 2nd floor ,00180,
Helsinki, Finland; and Philip Ginzboorg
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PATENT REEL: 044426 FRAME: 0519 In re Applin. of Costa et al. Attorney Docket No. <u>HW730893</u>

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.

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Date	Mario Costa
Date	Philip Ginzboorg
Date <u>2017-//-22</u>	Struck Hodby