507001168 11/30/2021

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PHILIP GINZBOORG	06/03/2020
VALTTERI NIEMI	11/29/2021
BO ZHANG	12/16/2019

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:	16598981

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:	HW746757
NAME OF SUBMITTER:	KAJAL AMIN
SIGNATURE:	/Kajal Amin/
DATE SIGNED:	11/30/2021

Total Attachments: 6

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PATENT 507001168 REEL: 058245 FRAME: 0155



PATENT REEL: 058245 FRAME: 0156

ASSIGNMENT

WHEREAS, WE,

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

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

have invented and own a certain invention entitled:

NETWORK AUTHENTICATION METHOD, DEVICE, AND SYSTEM

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2019-10-10 under U.S. Application No. 16598981 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 other writings and do such additional acts as the Assignee may deem necessary or desirable to

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In re Appln. of Ginzboorg et al. Attorney Docket No. HW746757

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	Phily Ghaboorg
	Philip Ginzboorg
Date	Valtteri Niemi
Date	Bo Zhang

ASSIGNMENT

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PATENT REEL: 058245 FRAME: 0159 In re Appln. of Ginzboorg et al. Attorney Docket No. HW746757

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.

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Date	
	Philip Ginzboorg
Date29 November 2021	Valtteri Niemi
Date	Bo Zhang

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Date				
		Philip Ginzboorg		
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Date		<u></u>		
		Valtteri Niemi		
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Date 20/7./2./	<u> </u>	170211000g		
1		Bo Zhang		