PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5100343

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LIYUN PANG	07/27/2018
PETER GROSCHE	08/08/2018
CHRISTOF FALLER	07/27/2018
ALEXIS FAVROT	07/31/2018

RECEIVING PARTY DATA

Name:	HUAWEI TECHNOLOGIES CO., LTD.	
Street Address:	Huawei Administration Building	
Internal Address:	Bantian, Longgang District	
City:	Shenzhen	
State/Country:	CHINA	
Postal Code:	518129	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16001411

CORRESPONDENCE DATA

Fax Number: (972)731-2289

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: 972-731-2288

Email: dallaspatents@dfw.conleyrose.com

Correspondent Name: GRANT RODOLPH

Address Line 1: 5601 GRANITE PARKWAY, SUITE 500

Address Line 4: PLANO, TEXAS 75024-6616

ATTORNEY DOCKET NUMBER:	4657-24000 (84609736US06)	
NAME OF SUBMITTER:	NICHOLAS K. BEAULIEU	
SIGNATURE:	/Nicholas K. Beaulieu/	
DATE SIGNED:	08/21/2018	

Total Attachments: 4

source=4657-24000_Signed_Assignment#page1.tif

PATENT REEL: 046646 FRAME: 0077

505053588

source=4657-24000_Signed_Assignment#page2.tif source=4657-24000_Signed_Assignment#page3.tif source=4657-24000_Signed_Assignment#page4.tif

> PATENT REEL: 046646 FRAME: 0078

ASSIGNMENT

WHEREAS, WE,

Livun Pang Peter Grosche

Huawei Technologies Duesseldorf Huawei Technologies Duesseldorf

GmbH, European Research
Center, Riesstr. 25, 80992
München, Germany; and
GmbH, European Research
Center, Riesstr. 25, 80992
München, Germany; and

Christof Faller Alexis Favrot

Illusonic GmbH, Bahnstrasse 23, CH-8610 Uster, Switzerland; and CH-8610 Uster, Switzerland.

have invented and own a certain invention entitled:

Audio signal processing apparatus and method

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2018-06-06, under U.S. Application No. 16001411 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 perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in

PATENT REEL: 046646 FRAME: 0079 In re Appln. of Pang et al. Attorney Docket No. 4657-24000

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.

and the second
Liyun Pang Cog
Peter Grosche
Christof Faller
Alexis Favrot

In re Appln. of Pang et al. Attorney Docket No. 4657-24000

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	Liyun Pang
Date 105 94, 2019	Peter Grosche
Date	Christof Faller
Date	Alexis Fayrot

In re Applin, of Pang et al. Attorney Docket No. 4657-24000

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	Liyun Pang
Date	
	Peter Grosche
Date July 27, 2018	
	Christof Faller
Date 11/31, 2019	
	Alexis Favror