## 505930004 02/21/2020

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5976722

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
CHENXI ZHU	02/20/2020
HNLGMEI LIU	02/20/2020
ZHENNIAN SUN	02/11/2020

## **RECEIVING PARTY DATA**

Name:	LENOVO (BEIJING) CO. LTD
Street Address:	NO. 6 SHANG DI WEST ROAD
Internal Address:	HAIDIAN DISTRICT
City:	BEIJING
State/Country:	CHINA
Postal Code:	100085

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16638386

## **CORRESPONDENCE DATA**

**Fax Number:** (801)531-1929

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.

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Correspondent Name: KUNZLER LAW GROUP - LENOVO

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ATTORNEY DOCKET NUMBER:	SEC920170084-US-PCT
NAME OF SUBMITTER:	BRIAN C. KUNZLER
SIGNATURE:	/Brian C. Kunzler/
DATE SIGNED:	02/21/2020

## **Total Attachments: 6**

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PATENT 505930004 REEL: 051893 FRAME: 0316

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> PATENT REEL: 051893 FRAME: 0317

## ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we Chenxi Zhu, Beijing, CHINA: Hongmei Liu, Beijing, CHINA: and Zhennian Sun, Beijing, CHINA: have sold, assigned and transferred, and do hereby sell, assign and transfer, unto Lenovo (Beijing) Limited, a corporation of China, having a place of business at 6 Shangdi West Road, Haidian District, Beijing, China 100085, and its successors, assigns, and legal representatives, the entire right, title and interest for the United States of America in and to certain inventions described, illustrated and claimed in the following applications:

U.S. Application Serial No. 16/638,386 February 11, 2020, filed herein and entitled: "ENCODING REFERENCE SIGNAL RECEIVED POWERS"

International Application PCT/CN2017/097223 filed on August 11, 2017 entitled "ENCODING REFERENCE SIGNAL RECEIVED POWERS"; and

I hereby also sell, assign and transfer unto Assignee, the entire right, title and interest in and to the invention and in and to applications for Letters Patent therefor in all countries foreign to the United States of America, including all rights under any and all international conventions and treaties in respect of the invention and the applications for Letters Patent in foreign countries, and I further authorize Assignee to apply for Letters Patent in foreign countries directly in its own name, and to claim priority of the filing date of the application for Letters Patent of the United States of America under the provisions of any and all international conventions and treaties.

I hereby also sell, assign and transfer unto Assignce, the entire right, title and interest in and to other applications for Letters Patent on the inventions referenced in this Assignment and Agreement, and all rights, title and interest in and to all applications for Letters Patent in respect of the invention filed under any and all international conventions and treaties together with the entire right, title and interest in and to Letters Patent which may be issued upon the application(s) or any application(s) otherwise claiming priority thereto, and upon any divisions, extensions, continuations, reissues and/or re-examinations of such application(s).

I further authorize Assignee to apply for Letters Patent directly in its own name where applicable, and to claim priority of the filing date of the application for Letters Patent filed under the laws of the applicable country and under the provisions of any and all international conventions and treaties.

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# DOLLER NUMBER SELVENTARIOS

The first success assignee to request the Commissioner of Patents of the United States of America to Issue any Letters Patents upon the aforesaid application, divisions extensions, continuations, reissues or re-examinations, to Assignee, for the sole use and sensit of Assignee, to the full end of the term for which Letters Patent may be granted the same as they would have been held and enjoyed by me had this assignment not been made, and I hereby authorize Assignee to request the equivalent authorities in foreign countries to issue the patents of their respective countries to Assignee.

agree that, when requested, I will, without charge to Assignee, but at its expense, ago all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing, maintaining and enforcing patents for the inventions in any and all countries and for vesting title thereto in Assignee.

covenant with Assignee that the interest and property hereby conveved is free from all prior assignment, grant, mortgage, license or other encumbrance.

1) Legal Name of Inventor: Chenxi Zhu	
Signature: 142	Date: 2/20/20
2) Legal Name of Inventor: <b>Hongme(Lin</b>	
Signature	Date
to Const Name of Inventor <b>Thennian Sun</b>	

PATENT REEL: 051893 FRAME: 0319

DOCKET NUMBER: SEC920170084-US-PCT

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For good and valuable consideration, the receipt of which is hereby acknowledged, we, **Chenxi Zhu, Beijing, CHINA**; **Hongmei Liu, Beijing, CHINA**; and **Zhennian Sun, Beijing, CHINA**; have sold, assigned and transferred, and do hereby sell, assign and transfer, unto Lenovo (Beijing) Limited, a corporation of China, having a place of business at 6 Shangdi West Road, Haidian District, Beijing, China 100085, and its successors, assigns, and legal representatives, the entire right, title and interest for the United States of America in and to certain inventions described, illustrated and claimed in the following applications:

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I hereby also sell, assign and transfer unto Assignee, the entire right, title and interest in and to other applications for Letters Patent on the inventions referenced in this Assignment and Agreement, and all rights, title and interest in and to all applications for Letters Patent in respect of the invention filed under any and all international conventions and treaties together with the entire right, title and interest in and to Letters Patent which may be issued upon the application(s) or any application(s) otherwise claiming priority thereto, and upon any divisions, extensions, continuations, reissues and/or reexaminations of such application(s).

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Page 1 of 2

I hereby authorize Assignee to request the Commissioner of Patents of the United States of America to issue any Letters Patents upon the aforesaid application, divisions, extensions, continuations, reissues or re-examinations, to Assignee, for the sole use and benefit of Assignee, to the full end of the term for which Letters Patent may be granted, the same as they would have been held and enjoyed by me had this assignment not been made, and I hereby authorize Assignee to request the equivalent authorities in foreign countries to issue the patents of their respective countries to Assignee.

I agree that, when requested, I will, without charge to Assignee, but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing, maintaining and enforcing patents for the inventions in any and all countries and for vesting title thereto in Assignee.

I covenant with Assignee that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license or other encumbrance.

(1)	Legal Name of Inventor: Chenxi Zhu		
	Signature:	_ Date:	
(2)	Legal Name of Inventor: <b>Hongmei Liu</b>		
	Signature: Hongmei Liu	_ Date:	2020-02-20
(3)	Legal Name of Inventor: <b>Zhennian Sun</b>		
	Signature:	Date:	

DOCKET NUMBER: SEC920170084-US-PCT

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I covenant with Assignee that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license or other encumbrance.

(1)	Legal Name of Inv	entor: Chenxi Zhu		
	Signature:		Date:	
(2)	Legal Name of Inv	entor: <b>Hongmei Liu</b>		
	Signature:		Date:	
(3)	Legal Name of Inv	entor: <b>Zhennian Sun</b>		
	Signature:	Zhennian Sun	Date:	20/2/11

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RECORDED: 02/21/2020