## 504602347 10/19/2017

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
QIANG MARCHANT	10/17/2017
JAMES ODIS PENDERGRAFT	10/19/2017
HAO SUN	10/17/2017
JICHAO ZHANG	10/17/2017

### **RECEIVING PARTY DATA**

Name:	EMC IP HOLDING COMPANY LLC
Street Address:	176 SOUTH STREET
City:	HOPKINTON
State/Country:	MASSACHUSETTS
Postal Code:	01748

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

Property Type	Number
Application Number:	15788383

## **CORRESPONDENCE DATA**

Fax Number:

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:** 508-898-8601

Email:docketing@WESTBORO-IP.COMCorrespondent Name:MUIRHEAD AND SATURNELLI, LLCAddress Line 1:200 FRIBERG PARKWAY, SUITE 1001

Address Line 4: WESTBOROUGH, MASSACHUSETTS 01581

ATTORNEY DOCKET NUMBER:	EMS-667US
NAME OF SUBMITTER:	ANNE E. SATURNELLI
SIGNATURE:	/Anne E. Saturnelli/
DATE SIGNED:	10/19/2017

## **Total Attachments: 5**

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PATENT REEL: 043906 FRAME: 0348

Attorney Docket No.: EMS-667US EMC Docket No.: 108593

#### **ASSIGNMENT**

WHEREAS, we, Qiang MA, James Odis PENDERGRAFT, Hao SUN and Jichao ZHANG, have invented an invention comprising and/or embodying certain improvements or discoveries or both as described in an application for Letters Patent of the United States entitled TELEMETRY SERVICE, the specification of which:

[ X J	is being executed on even date	nerewith and is about to be filed in the United State	S
	Patent Office;		
[]	was filed on	as U.S. Application No;	
[]	was patented under U.S. Patent	t No	

WHEREAS, EMC IP HOLDING COMPANY LLC (hereinafter "ASSIGNEE"), which is a corporation organized and existing under the laws of Delaware and having a usual place of business at 176 South Street, Hopkinton, Massachusetts 01748 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey to ASSIGNEE all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

**AND**, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

PATENT REEL: 043906 FRAME: 0349

Attorney Docket No.: EMS-667US EMC Docket No.: 108593

parenthesis ( 15/788,383 filed October	Nuirhead and Saturnelli, LLC to insert here in 19, 2017 the application number and filing pplication) to facilitate the recording or other official	
processing of this Assignment.		
<b>IN TESTIMONY WHEREOF</b> , we have hereobelow:	unto set our hands and affixed our seals as set forth	
Date: 2017. (0.17	Qi'ang Ma Inventor's Signature	
	Inventor's Signature	
Print full name of first inventor:	Qiang MA	
Residence:	Room 8-2-2201, Number 169, Second Binhe Road	
	Huayang town, Shuangliu County, Chengdu, China	
Citizenship:	China	
Mailing Address:	Same as above	
I Zhe Ymg (name  Jinao Yum #7, Jinfung Lu, Jinniu  was personally present and did see @: any fl  assignment) who is personally known to me, exec	۸م (name of person signing the	
(signate	ure of first witness)	
Zhe Yang (signature of first witness)  Signed at 7/F, C12, Timpu Software Park, (location of witness signature)		
on this day Oct. (7 of 2017. (date of signature)		
1 Mao Zhu (name	e) whose residential address is	
1 Mao Zhu (name Rossm 11-1504, One Tiantu Ros	nd, Chenedu Hi-Tech Zone, China	
was personally present and did see <u>Qiang</u> , assignment) who is personally known to me, exec	Ma (name of person signing the	
<u>Mao Zhu</u> (signatu	ure of second, witness)	
Mao Zhu (signatu Signed at 7/F, CD, Tianfu Software Pari	k Cheughu, Chinh (location of witness signature)	
on this day <u>Oce . 17</u> of 20 <u>17</u> (date of signature)		

Attorney Docket No.: EMS-667US

EMC Docket No.: 108593

Date: 10/19/2017	Saw Introff	
,	Inventor's Agnature	
Print full name of second inventor:	James Odis PENDERGRAFT	
Residence:	5512 Blue Sage Drive	
	Raleigh, NC 27606	
Citizenship:	USA	
Mailing Address:	Same as above	
1 John Joseph Pashby (name 108 Larkwood Lane, Cary NC, 25 personally present and did see James adis Re	7518 (name of person signing the	was
assignment) who is personally known to me, exec	cute the above assignment.	
John Juney Vanhy (signat	ure of first witness)	
Signed at 5512 Blue Sage Drive (locat	ion of witness signature)	
on this day October 19 of 2017. (date of signature)		
Neelle Marie Pendergraf (name 5512 Blue Sage Drive Raleigh, 1	e) whose residential address is	was
personally present and did see James Odis assignment) who is personally known to me, execution	Yendergraff (name of person signing the	
Mall Made and	ure of second witness)	
Signed at 5512 Blue Sage Drive, Raleic	μ Νζ (location of witness signature)	
on this day October 19 of 2017.	(date of signature)	

Attorney Docket No.: EMS-667US EMC Docket No.: 108593

Date: ( ) & . 17, 201	( Jan Sun	
I	Inventor's Signature	
Print full name of third inventor:	Hao SUN	
Residence:	Room 401, No. 11, Lane 3885, North Yanggao Road	
	201208 Shanghai, China	
Citizenship:	China	
Mailing Address:	Same as above	
1 .		
1 Sharmon Live (name	) whose residential address is	
Room 40 , NO. 50, Yuging Ro	ad, 201315 Shanghai, P.K. China	
was personally present and did see	Sun (name of person signing the ute the above assignment.	
Shymon (signatu		
Signed at EMC Shamphai COE (locati	on of witness signature)	
on this day Oct 17 of 2017.	(date of signature)	
1 Dazhi Dong (name	) whose residential address is	
Room 101, No. 18. aixin Road,	201108 Shanghai. P.R. China	
was personally present and did see $\frac{\mathcal{Sun}}{\mathcal{Sun}}$ (name of person signing the assignment) who is personally known to me, execute the above assignment.		
Dark Dong (signatu	re of second witness)	
Signed at EMC Shangha; Co E on this day Oct 1 of 201/.	(location of witness signature)	
on this day $\frac{\partial ct}{\partial t}$ of 20 $\frac{1}{2}$ .	(date of signature)	

Attorney Docket No.: EMS-667US EMC Docket No.: 108593

Date: Oct. 17. 20/7	Tichao Thang
·	Inventor's Signature
Print full name of fourth inventor:	Jichao ZHANG
Residence:	2f, Building #2, Kic Plaza, No.252
	272103 Shanghai, China
Citizenship:	China
Mailing Address:	Same as above
was personally present and did see	ute the above assignment. ure of first witness)
Signed at EMC Shunghni COE (locate on this day Oct. 17 of 2017)	ion of witness signature) (date of signature)
1 Nimbs Wei (name	
was personally present and did see	ute the above assignment.
Milling Wei (signate	ure of second witness)
Signed at EMC Shunghai COT-	
on this day Oct. 7 of 2017.	(date of signature)