504464360 07/19/2017

PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------|----------------|
| JUN WU | 07/19/2017 |
| MINQIANG WU | 07/19/2017 |
| WEI WANG | 07/19/2017 |

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15654244 |

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-663US |
|-------------------------|----------------------|
| NAME OF SUBMITTER: | ANNE E. SATURNELLI |
| SIGNATURE: | /Anne E. Saturnelli/ |
| DATE SIGNED: | 07/19/2017 |

Total Attachments: 4

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PATENT 504464360 REEL: 043046 FRAME: 0492

ASSIGNMENT

WHEREAS, we, Jun WU, Minqiang WU and Wei WANG, 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 TECHNIQUES FOR PERFORMING AN UPGRADE, the specification of which:

| [X] | is being executed on eve | n date herewith and is about to be filed in the United States |
|------|--------------------------|---|
| | Patent Office; | |
| [] | was filed on | as U.S. Application No; |
| [] | was patented under U.S. | Patent Noon |
| | | |

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.

| parenthesis (_15/654,244 filed July 19, 20 | luirhead and Saturnelli, LLC to insert here in 17) the application number and filing pplication) to facilitate the recording or other official | |
|---|---|--|
| IN TESTIMONY WHEREOF, we have here below: | unto set our hands and affixed our seals as set forth | |
| Date: 7/19/201] | Jun Wu Inventor's Signature | |
| | Inventor's Signature | |
| Print full name of first inventor: | Jun WU | |
| Residence: | 2F., Building #2, KIC Plaza, No. 252 Songhu Road, | |
| | Shanghai 200433 P. R. C | |
| Citizenship: | China | |
| Mailing Address: | Same as above | |
| I Bo /e (name 2F, Building #2, KIC Plaza, M0.252 personally present and did see Jun Www assignment) who is personally known to me, executed by the signed at Shanghai (located on this day July 19 of 2017) | ure of first witness) | |
| on this day July 19 of 2017 Ailsa Sun (nam. 2F. Building#2, KIC Plaza, No 25) | | |
| 2F. Building# 2, KIC Plaza, No 25 | (name of person signing the | |
| personally present and did see | | |
| Ails a Sun (signated Signed at Shang hai on this day July 19 of 20 / | cure of second witness) | |
| Signed at Shang hai | (location of witness signature) | |
| on this day July 19 of 20 / | (date of signature) | |

| Date: _7/18/2017 | Mingiang Wu Inventor's Signature |
|---|---|
| | ' Inventor's Signature |
| Print full name of second inventor: | Minqiang WU |
| Residence: | 2F., Building #2, KIC Plaza, No. 252 Songhu Road, |
| | Shanghai 200433 P. R. C |
| Citizenship: | China |
| Mailing Address: | Same as above |
| I heng Jinyuan (name) J- Building the KC Plaza, No. 18 personally present and did see Ming lang (assignment) who is personally known to me, execution signed at hanglar (location this day July of 2017. | ute the above assignment. |
| I James Why 2F, Building #12, KTC Plaza, No. 252 personally present and did see Mingiang W assignment) who is personally known to me, exec James Ding (signate Signed at Shanghai | whose residential address is Songha Road, Shanghai was a man (name of person signing the ute the above assignment. Ire of second witness) [Indication of witness signature] |
| on this day July 19 of 2017. | (date of signature) |

| Date: 7/19/2017 | unn | |
|--|---|-----|
| • | Inventor's Signature | |
| Print full name of third inventor: | Wei WANG | |
| Residence: | 1804 Windsor Ridge Dr. | |
| | Westborough, MA 01581 | |
| Citizenship: | China | |
| Mailing Address: | Same as above | |
| Gregory Schaffer (name 19 High and St Berl personally present and did see Wei Wassignment) who is personally known to me, execution assignment who is personally known to me, execution assignment who is personally known to me, execution as a sign of some state of the second s | (name of person signing the cute the above assignment. ure of first witness) ion of witness signature) (date of signature) | was |
| Personally present and did see we was signment) who is personally known to me, executions assignment. | name of person signing the | vas |
| (signatu | ure of second witness) | |
| Signed at Hopkinten, MA | (location of witness signature) | |
| on this day July 19 of 2017. | (date of signature) | |