

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4429055

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
AMIT PUNDALIK ANCHI	05/12/2017
SRINIVAS KANGYAMPETA	05/12/2017
ANKUR DIXIT	05/23/2017
NOUFAL MUHAMMED	05/15/2017
JAEOO JUNG	05/19/2017
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:	15582711
CORRESPONDENCE DATA	
Fax Number:	(508)366-4688
<i>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.</i>	
Phone:	508-616-2900
Email:	Docket@BainwoodHuang.com
Correspondent Name:	BAINWOOD, HUANG & ASSOCIATES, LLC
Address Line 1:	2 CONNECTOR ROAD
Address Line 4:	WESTBOROUGH, MASSACHUSETTS 01581
ATTORNEY DOCKET NUMBER:	1003-476
NAME OF SUBMITTER:	DAVID E. HUANG, ESQ.
SIGNATURE:	/David E. Huang/
DATE SIGNED:	05/24/2017
Total Attachments: 15	
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ASSIGNMENT

WHEREAS, I, Amit Pundalik Anchi, as the original inventor or an original joint inventor 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

**DATA STORAGE SYSTEM WITH PORT CONGESTION HINTING FOR HOST
MULTIPATHING**

which is further identified by Attorney Docket Number 1003-476;

WHEREAS, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a limited liability company organized and existing under the laws of the state of Delaware and having a usual place of business at 176 South Street, Hopkinton, MA, 01748, USA, desires to acquire an interest therein in accordance with agreements duly entered into with me;

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, I 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 me had this assignment and sale not been made; I 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. I 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, I hereby further agree for myself and my 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, I 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;

AND I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses

(15/582,711 , filed April 30, 2017)

the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

PATENT ASSIGNMENT
Attorney Docket No.: 1003-476
Client Docket No.: EMC-17-0132

Date: 12-MAY-2017



Inventor's Signature

Legal name of inventor:

Amit Pundalik Anchi

Residence:

Raja Aristos Apartment, #302 B-Block
Doddakammanahalli Main Road
Bangalore, 560076
India

Mailing Address

Same as above

Citizenship

IN

I MADHU TADWEE (name) whose residential address is

Raja Aristos Apt #123, Doddakammanahalli Main Road, Bangalore

was personally present and did see Amit Pundalik Anchi (name of person signing the assignment) who is personally known to me, execute the above assignment

T. L. [Signature] (signature of first witness)

Signed at Bangalore (location of witness signature)

on this day 12-May of 20 17. (date of signature)

I SANJIB MALLICK (name) whose residential address is

752 Jal Vayu Towers, NGER Layout, Bangalore 560038

was personally present and did see Amit Pundalik Anchi (name of person signing the assignment) who is personally known to me, execute the above assignment.

Sanjib Mallik (signature of second witness)

Signed at Bangalore (location of witness signature)

on this day 12-May of 20 17. (date of signature)

ASSIGNMENT

WHEREAS, I, Srinivas Kangyampeta, as the original inventor or an original joint inventor 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

**DATA STORAGE SYSTEM WITH PORT CONGESTION HINTING FOR HOST
MULTIPATHING**

which is further identified by Attorney Docket Number 1003-476;

WHEREAS, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a limited liability company organized and existing under the laws of the state of Delaware and having a usual place of business at 176 South Street, Hopkinton, MA, 01748, USA, desires to acquire an interest therein in accordance with agreements duly entered into with me;

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, I 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 me had this assignment and sale not been made; I 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. I 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, I hereby further agree for myself and my 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, I 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;

AND I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses

(15/582,711 , filed April 30, 2017)

the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

Date 12/5/2017

Srinivas
Inventor's Signature

Legal name of inventor:

Srinivas Kangyampeta

Residence:

8, 35 A Cross, 11 Main, Jayanagar 4 T Block
Bangalore 560041
India

Mailing Address

Same as above

Citizenship

IN

I IMPALLI TARUN RE (name) whose residential address is

Raja Arista Apt #723 Doddakannanahalli Road Bangalore

was personally present and did see Srinivas Kangyampeta (name of person signing the assignment) who is personally known to me, execute the above assignment.

T.L. [Signature] (signature of first witness)

Signed at Bangalore (location of witness signature)

on this day 12-May of 20 17. (date of signature)

I SANJIB MALLICK (name) whose residential address is

752 JAL VAYU TOWERS, NGEF LAYOUT, BANGALORE 560038

was personally present and did see Srinivas Kangyampeta (name of person signing the assignment) who is personally known to me, execute the above assignment.

Sanjib Mallik (signature of second witness)

Signed at Bangalore (location of witness signature)

on this day 12-May of 20 17. (date of signature)

ASSIGNMENT

WHEREAS, I, Ankur Dixit, as the original inventor or an original joint inventor 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

**DATA STORAGE SYSTEM WITH PORT CONGESTION HINTING FOR HOST
MULTIPATHING**

which is further identified by Attorney Docket Number 1003-476;

WHEREAS, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a limited liability company organized and existing under the laws of the state of Delaware and having a usual place of business at 176 South Street, Hopkinton, MA, 01748, USA, desires to acquire an interest therein in accordance with agreements duly entered into with me;

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, I 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 me had this assignment and sale not been made; I 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. I 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, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other

PATENT ASSIGNMENT
Attorney Docket No.: 1003-476
Client Docket No.: EMC-17-0132

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, I 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;

AND I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses

(15/582,711 , filed April 30, 2017)

the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

PATENT ASSIGNMENT
Attorney Docket No.: 1003-476
Client Docket No.: EMC-17-0132

Date: 5/23/2017

Ankur

Inventor's Signature

Legal name of inventor:

Ankur Dixit

Residence:

T 305, Vintage Elite B Block
Kodichikanahalli, Near Vijaya Bank Colony
Bangalore, 560076
India

Mailing Address

Same as above

Citizenship

IN

I NAVINI KAMATH (name) whose residential address is

#106, CRR Residency, BTS Main Road, AREkere, BANGALORE 560076

was personally present and did see Ankur Dixit (name of person signing the assignment) who is personally known to me, execute the above assignment.

all

(signature of first witness)

Signed at BANGALORE (location of witness signature)

on this day 23rd May of 2017. (date of signature)

I M. ASIF KHAN (name) whose residential address is

Flat 202, Vijaya Bharathi Residency, 442 T Main, Vijaya Bank Colony -

was personally present and did see Ankur Dixit (name of person signing the assignment) who is personally known to me, execute the above assignment.

Blr - 76

M. Anj K

(signature of second witness)

Signed at BANGALORE (location of witness signature)

on this day 23 May of 2017. (date of signature)

ASSIGNMENT

WHEREAS, I, Noufal Muhammed, as the original inventor or an original joint inventor 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

**DATA STORAGE SYSTEM WITH PORT CONGESTION HINTING FOR HOST
MULTIPATHING**

which is further identified by Attorney Docket Number 1003-476;

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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, I 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 me had this assignment and sale not been made; I 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. I 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, I hereby further agree for myself and my 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;

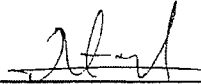
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AND I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses

(15/582,711 , filed April 30, 2017)

the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

Date: 15/5/2017



Inventor's Signature

Legal name of inventor: Noufal Muhammed
Residence: Kizhakkekara House
Kuruvattoor PO
Palakkad, 679336
India
Mailing Address: Same as above
Citizenship: IN

I Dharmesh J. Desai (name) whose residential address is
J P Nagar phase-1, Bangalore 560078, India
was personally present and did see Noufal Muhammed (name of person signing the
assignment) who is personally known to me, execute the above assignment.

D. J. Desai (signature of first witness)

Signed at Tower B, EMC, Bangalore (location of witness signature)

on this day 15th May of 2017. (date of signature)

I Lagnajit Dholi (name) whose residential address is
VRR Lake View Appt. Doddanekundi Bangalore 560037
was personally present and did see Noufal Muhammed (name of person signing the
assignment) who is personally known to me, execute the above assignment.

Lagnajit Dholi (signature of second witness)

Signed at Tower B, EMC, Bangalore (location of witness signature)

on this day 15th May of 2017. (date of signature)

ASSIGNMENT

WHEREAS, I, Jaeyoo Jung, as the original inventor or an original joint inventor 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

**DATA STORAGE SYSTEM WITH PORT CONGESTION HINTING FOR HOST
MULTIPATHING**

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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, I 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 me had this assignment and sale not been made; I 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. I 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;

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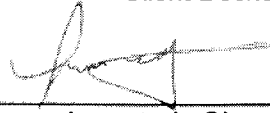
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AND I hereby authorize the attorneys at Bainwood Huang & Associates LLC to insert here in parentheses

(15/582,711 , filed April 30, 2017)

the application number and filing date of said application (or foreign counterpart application) to facilitate the recording or other official processing of this Assignment.

Date: 5/19/2017

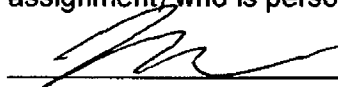


Inventor's Signature

Legal name of inventor: Jaeyoo Jung
Residence: 49 Cherry Street
Shrewsbury, MA 01545
United States of America
Mailing Address Same as above
Citizenship US

I IAN WIGMORE (name) whose residential address is
5 BUTTERFIELD DRIVE, WESTBORO, MA 01581

was personally present and did see Jaeyoo Jung (name of person signing the assignment) who is personally known to me, execute the above assignment.



(signature of first witness)

Signed at 176 SOUTH ST, WOBURNTON, MA (location of witness signature)

on this day 5/19/17 of 2017. (date of signature)

I ARIEH DON (name) whose residential address is
45 DEXTER RD NEWTON, MA 02469 USA

was personally present and did see Jaeyoo Jung (name of person signing the assignment) who is personally known to me, execute the above assignment.



(signature of second witness)

Signed at Woburn, MA (location of witness signature)

on this day May 19 of 2017. (date of signature)