

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT5492535

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
PHILIPPE ARMANGAU	03/19/2019
VAMSI K. VANKAMAMIDI	03/21/2019
STEVEN A. MORLEY	03/21/2019
DANIEL E. CUMMINS	03/21/2019
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:	16361338
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:	1003-950
NAME OF SUBMITTER:	DAVID E. HUANG, ESQ.
SIGNATURE:	/David E. Huang, Reg. No. 39,229/
DATE SIGNED:	04/25/2019
Total Attachments: 12	
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source=1003-950-Inv2-Assignment-VANKAMAMIDI#page1.tif
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source=1003-950-Inv3-Assignment-MORLEY#page1.tif
source=1003-950-Inv3-Assignment-MORLEY#page2.tif
source=1003-950-Inv3-Assignment-MORLEY#page3.tif
source=1003-950-Inv4-Assignment-CUMMINS#page1.tif
source=1003-950-Inv4-Assignment-CUMMINS#page2.tif
source=1003-950-Inv4-Assignment-CUMMINS#page3.tif

ASSIGNMENT

WHEREAS, I, Philippe Armangau, 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

PERFORMING COMPRESSION AND DEDUPLICATION AT DIFFERENT GRANULARITIES

which is further identified by Attorney Docket Number 1003-950;

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;

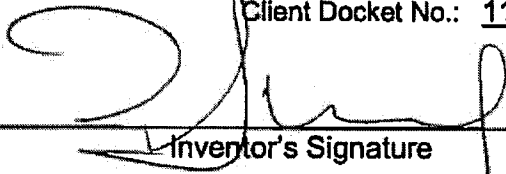
AND, I do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

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

(16/361,338 , filed 3/22/2019)

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: 3/19/19



Inventor's Signature

Legal name of inventor: Philippe Armangau
Residence: 51 Seminole Road
Acton, MA 01720
United States of America
Mailing Address: Same as Above
Citizenship: US

I Kathy Dion (name) whose residential address is
28 Wayside Rd. Worcester, MA 01605
was personally present and did see Philippe Armangau (name of person signing the
assignment) who is personally known to me, execute the above assignment.

Kathy Dion (signature of first witness)
Signed at Hopkinton, MA (location of witness signature)
on this day 19 March of 2019. (date of signature)

I Christine Buckley (name) whose residential address is
11 Aspen way, Shrewsbury MA 01545
was personally present and did see Philippe Armangau (name of person signing the
assignment) who is personally known to me, execute the above assignment.

Christine Buckley (signature of second witness)
Signed at Hopkinton (location of witness signature)
on this day 3/19 of 2019. (date of signature)

ASSIGNMENT

WHEREAS, I, Vamsi K. Vankamamidi, 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

PERFORMING COMPRESSION AND DEDUPLICATION AT DIFFERENT GRANULARITIES

which is further identified by Attorney Docket Number 1003-950;

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

(16/361,338 , filed 3/22/2019)

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: 21-March-2019

Vamsi

Inventor's Signature

Legal name of inventor: Vamsi K. Vankamamidi
Residence: 21 Spruce Street, Apt. B-21
Hopkinton, MA 01748
United States of America
Mailing Address: Same as Above
Citizenship: US

I Ashok Tamilarasan (name) whose residential address is

_____ was personally present and did see Vamsi K. Vankamamidi (name of person signing the assignment) who is personally known to me, execute the above assignment.

T. Abdul

(signature of first witness)

Signed at 228 South St. Hopkinton, MA-01748 (location of witness signature)

on this day 21 - March of 2019. (date of signature)

I Ying Dong (name) whose residential address is

_____ was personally present and did see Vamsi K. Vankamamidi (name of person signing the assignment) who is personally known to me, execute the above assignment.

[Signature]

(signature of second witness)

Signed at 228 South St. Hopkinton, MA 01748 (location of witness signature)

on this day 21 - March of 2019. (date of signature)

ASSIGNMENT

WHEREAS, I, Steven A. Morley, 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

PERFORMING COMPRESSION AND DEDUPLICATION AT DIFFERENT GRANULARITIES

which is further identified by Attorney Docket Number 1003-950;

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;

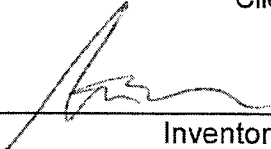
AND, I do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

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

(16/361,338 , filed 3/22/2019)

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: 3/21/2019



Inventor's Signature

Legal name of inventor: Steven A. Morley
Residence: 7 Talbott Farm Drive
Mendon, MA 01756
United States of America
Mailing Address: Same as Above
Citizenship: US

I ISTVAN GONCZI (name) whose residential address is
18 OSPREY DR., BERKLEY, MA 02779
was personally present and did see Steven A. Morley (name of person signing the
assignment) who is personally known to me, execute the above assignment.



(signature of first witness)
Signed at 228 South St. Hoptinton, MA (location of witness signature)
on this day 3/21/2019 of 20 19. (date of signature)

I MONICA CHAUDHARY (name) whose residential address is
~~228 South St~~ 53 Aspen Avenue, South Grafton, MA
was personally present and did see Steven A. Morley (name of person signing the
assignment) who is personally known to me, execute the above assignment.

Monica

(signature of second witness)
Signed at 228 South Street, South Hoptinton, MA (location of witness signature)
on this day 03/21/ of 20 _____. (date of signature)

ASSIGNMENT

WHEREAS, I, Daniel E. Cummins, 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

PERFORMING COMPRESSION AND DEDUPLICATION AT DIFFERENT GRANULARITIES

which is further identified by Attorney Docket Number 1003-950;

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

(16/361, 338 , filed 3/22/2019

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: 3/21/2019


Inventor's Signature

Legal name of inventor: Daniel E. Cummins
Residence: 12 Cathedral Lane
Hudson, NH 03051
United States of America
Mailing Address: Same as Above
Citizenship: US

I Jamie Tremper (name) whose residential address is
22 Bodio Circle, Milford MA 01457

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

 (signature of first witness)

Signed at 228 South Street, Hopkinton MA (location of witness signature)

on this day 21st of 2019. (date of signature)

I Sivixay Rutherford (name) whose residential address is
4 Plant St Cumberland RI 02864

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

 (signature of second witness)

Signed at 228 South Street, Hopkinton MA (location of witness signature)

on this day 21st of 2019. (date of signature)