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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
STEFAN VOSS	05/09/2019
SADAGOPAN BALARAMAN	05/15/2019
STEPHEN WALSH	05/13/2019
ANTHONY MULLEN	06/05/2019
EDDIE PAVKOVIC	05/17/2019
ALLEN YEN	05/12/2019
ANDREW VANDAMME	05/14/2019

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:	16425071

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	965-114610.01
NAME OF SUBMITTER:	AIMEE MAJDOUB
SIGNATURE:	/Aimee Majdoub/
DATE SIGNED:	06/06/2019

PATENT REEL: 049397 FRAME: 0701

Total Attachments: 8 source=965-114610_Assignment#page1.tif source=965-114610_Assignment#page2.tif source=965-114610_Assignment#page3.tif source=965-114610_Assignment#page4.tif source=965-114610_Assignment#page5.tif source=965-114610_Assignment#page6.tif source=965-114610_Assignment#page7.tif source=965-114610_Assignment#page8.tif

PATENT REEL: 049397 FRAME: 0702

ASSIGNMENT

WHEREAS, We, Stefan Voss, Sadagopan Balaraman, Stephen Walsh, Anthony Mullen, Eddie Pavkovic, Allen Yen and Andrew VanDamme, 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 SECURE SYNCHRONIZATION AND MANAGEMENT OF RECOVERY DATA FOR BACKUP SYSTEMS, the specification of which:

[]	is being executed on even date herewith and is about to be filed in the United States Patent Office;
[X]	was filed on May 29, 2019 as U.S. Application No. <u>16/425,071</u> ;
[]	was patented under U.S. Patent Noon

WHEREAS, EMC IP Holding Company LLC (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth 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.

Date: 05/09/2019	/STEFAN VOSS/
***************************************	Inventor's Signature
Print full name of first inventor:	Stefan Voss
Residence:	198 Eliot Street Milton, MA 02186
Citizenship:	U.S.
Mailing Address:	Same as above
Date:	
•	Inventor's Signature
Print full name of first inventor:	Sadagopan Balaraman
Residence:	3 Byron's Way Franklin, MA 02038
Citizenship:	India
Mailing Address:	Same as above

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.

Date:	
***************************************	Inventor's Signature
Print full name of first inventor:	Stefan Voss
Residence:	198 Eliot Street Milton, MA 02186
Citizenship:	U.S.
Mailing Address:	Same as above
Date: 05/15/2019	Inventor's Signature
Print full name of first inventor:	Sadagopan Balaraman
Residence:	3 Byron's Way Franklin, MA 02038
Citizenship:	India
Mailing Address:	Same as above

	Attorney Docket No.: 965-114610.01 DELL EMC Docket No.: EMC-114610.01
Date: 5/13/19	1 4/1
/ / .	//Inventor's Signature
Print full name of first inventor:	Stephen Walsh
Residence:	43 Howard Street Milford, MA 01757
Citizenship:	U.S.
Mailing Address:	Same as above
Date:	
00074-070-1007 EXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Inventor's Signature
Print full name of first inventor:	Anthony Mullen
Residence:	1415 W. 12 th Avenue Broomfield, CO 80020
Citizenship:	U.S.
Mailing Address:	Same as above
Date:	
***************************************	Inventor's Signature
Print full name of first inventor:	Eddie Pavkovic
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Citizenship:	U.S.

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Mailing Address:

Date:	
***************************************	Inventor's Signature
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Residence:	43 Howard Street Milford, MA 01757
Citizenship:	U.S.
Mailing Address:	Same as above
Date: June 5, 2019	Inventor's Signature
Print full name of first inventor:	Anthony Mullen
Residence:	1415 W. 12 th Avenue Broomfield, CO 80020
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Print full name of first inventor:	Eddie Pavkovic
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Mailing Address:	Same as above

Date:	
	Inventor's Signature
Print full name of first inventor:	Stephen Walsh
Residence:	43 Howard Street Milford, MA 01757
Citizenship:	U.S.
Mailing Address:	Same as above
Date:	
	Inventor's Signature
Print full name of first inventor:	Anthony Mullen
Residence:	1415 W. 12 th Avenue Broomfield, CO 80020
Citizenship:	U.S.
Mailing Address:	Same as above
Date:	
05/17/2019	/EDDIE PAVKOVIC/
	Inventor's Signature
Print full name of first inventor:	Eddie Pavkovic
Residence:	7 Magnolia Drive Westford, MA 01886
Citizenship:	U.S.
Mailing Address:	Same as above

Date: 5/12/2019	ACCO
Print full name of first inventor: Residence:	Allen Yen 40683 Palatino Street Fremont, CA 94539
Citizenship: Mailing Address:	U.S. Same as above
Date:	
	Inventor's Signature
Print full name of first inventor:	Andrew VanDamme
Residence:	8 Cirrus Drive, #004 Ashland, MA 01721
Citizenship:	U.S.

Same as above

Mailing Address:

Date:	
	Inventor's Signature
Print full name of first inventor:	Allen Yen
Residence:	40683 Palatino Street Fremont, CA 94539
Citizenship:	U.S.
Mailing Address:	Same as above
Date: 5/14/2019	/Andrew Van Damme/
-	Inventor's Signature
Print full name of first inventor:	Andrew VanDamme
Residence:	8 Cirrus Drive, #004 Ashland, MA 01721
Citizenship:	U.S.
Mailing Address:	Same as above