504896187 05/02/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4942930

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HENRY WALLACE DORNEMANN	09/19/2014
RAHUL S. PAWAR	09/11/2014
PARAMASIVAM KUMARASAMY	09/19/2014
SATISH CHANDRA KILARU	09/17/2014
ANANDA VENKATESHA	09/19/2014

RECEIVING PARTY DATA

Name:	COMMVAULT SYSTEMS, INC.
Street Address:	1 COMMVAULT WAY
City:	TINTON FALLS
State/Country:	NEW JERSEY
Postal Code:	07724

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15966522

CORRESPONDENCE DATA

Fax Number: (949)760-9502

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: 9497600404

Email: EFILING@knobbe.com

KNOBBE MARTENS OLSON & BEAR LLP **Correspondent Name:**

Address Line 1: 2040 MAIN STREET

Address Line 2: 14TH FLOOR

Address Line 4: IRVINE, CALIFORNIA 92614

ATTORNEY DOCKET NUMBER:	COMMV.224A1C2
NAME OF SUBMITTER:	SEAN AMBROSIUS
SIGNATURE:	/Sean Ambrosius/
DATE SIGNED:	05/02/2018
	·

Total Attachments: 20

PATENT REEL: 045695 FRAME: 0024

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PATENT REEL: 045695 FRAME: 0025

ASSIGNMENT BY INVENTORS

This Assignment is by the following individuals (individually and together, the "Assignor"):

- Henry Wallace DORNEMANN, a citizen of USA, and having a mailing address of 19 Russell Terrace, Eatontown, NJ 07724, USA;
- Rahul S. PAWAR, a citizen of India, and having a mailing address of 19 Barn Swallow Blvd., Marlboro, NJ 07746, USA;
- Paramasivam KUMARASAMY, a citizen of USA, and having a mailing address of 327
 Devon Place, Morganville, NJ 07751, USA;
- Satish Chandra KILARU, a citizen of India, and having a mailing address of 61 Inwood Drive, Manalapan, NJ 07726, USA; and
- Ananda VENKATESHA, a citizen of India, and having a mailing address of 34 Whittier Drive, Manalapan, NJ 07726, USA.

The Assignor invented and/or co-invented one or more inventions, contributions, concepts, ideas, developments, discoveries, processes, formulas, methods, compositions, techniques, technology, articles, machines, improvements, and all related know-how (collectively "Invention(s)") described or claimed in an application for Patent of the United States, which is currently entitled EFFICIENTLY RESTORING EXECUTION OF A BACKED UP VIRTUAL MACHINE BASED ON COORDINATION WITH VIRTUAL MACHINE FILE RELOCATION OPERATIONS and naming Assignor as the sole inventor(s), and filed on September 22, 2014 as U.S. Application No. 14/493200 (the "Application"). The Assignor authorizes the Assignee, identified below, or its representatives to insert the application number and filing date of the Application after they are known.

Assignor desires to assign the entire right, title and interest in and to the Invention(s), the Application, and all related rights to CommVault Systems, Inc., a Delaware corporation having its principal place of business at 2 Crescent Place, Oceanport, New Jersey 07757 (the "Assignee") pursuant to this Assignment.

For good and valuable consideration, the receipt and sufficiency of which Assignor acknowledges, Assignor hereby presently and irrevocably assigns to Assignee the entire right, title, and interest throughout the world in and to the following (collectively, the "Assigned Patent Rights"):

- (a) the Invention(s) and Application;
- (b) all provisional patent applications relating to the Invention(s) and Application;
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 - (d) all patents that may be granted on any of the foregoing in clauses (a) through (c);
- (e) all rights of priority under United States law and International Conventions relating to any of the foregoing in clauses (a) through (d);
- (f) all reissues, reexaminations, *inter partes* reviews, post-grant reviews, covered business method patent reviews, supplemental examinations, renewals, substitutes, and extensions of any of the foregoing in clauses (a) through (e);
- (g) the right to file foreign and United States applications on the Invention(s), including filing directly in the name of Assignee; and

PATENT REEL: 045695 FRAME: 0026

(h) all past, present, and future: claims, causes of action, and enforcement rights for infringement or violation of any of the foregoing in clauses (a) through (f), including the right to sue and collect damages, royalties, and other remedies.

Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any official of any country, whose duty it is to issue patents on applications, to issue all patents subject to this Assignment to the Assignee.

Assignor represents that he or she has not previously assigned or licensed, or promised to assign or license, the Assigned Patent Rights to anyone other than Assignee, or taken any other action that conflicts with this Assignment or grants any immunities or rights under the Assigned Patent Rights to anyone other than Assignee.

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This Assignment is effective: August 11, 2014.

Assignor's Signature:	Man Ann
	Henry Wallace DORNEMANN
Attorney's Signature Johnson	Li Date: 19 Sept. 2014
authorized pursuant to N.J.S.A. 41:2-1, having idea	an Attorney-at-Law of the State of New Jersey, ntified the person(s) who executed the foregoing
document and who affirmed execution of same.	
Assignor's Signature:	
	Rahul S. PAWAR
Attorney's Signature:	Date:
Attorney's Name: JOSEPHINE A. PALTIN, authorized pursuant to N.J.S.A. 41:2-1, having iden	an Attorney-at-Law of the State of New Jersey, ntified the person(s) who executed the foregoing

Assignee Docket No.: 100.443.US1.160

authorized pursuant to N.J.S.A. 41:2-1, having identified the person(s) who executed the foregoing

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document and who affirmed execution of same.

Assignor's Signature:	
	Henry Wallace DORNEMANN
Attorney's Signature:	Date:
Attorney's Name: JOSEPHINE A. PALTIN authorized pursuant to N.J.S.A. 41:2-1, having ide document and who affirmed execution of same.	, an Attorney-at-Law of the State of New Jersey, entified the person(s) who executed the foregoing
Assignor's Signature:	
	Rahul S. PAWAR
Attorney's Signature: <u>Aug Mine A. H</u>	Date: Sept. 11,2014
Attorney's Name: JOSEPHINE A. PALTIN	, an Attorney at Law of the State of New Jersey,

authorized pursuant to N.J.S.A. 41:2-1, having identified the person(s) who executed the foregoing

Assignor's Signature: Paramasivam KUMARASAMY Attorney's Signature: _____ Date: Attorney's Name: JOSEPHINE A. PALTIN, an Attorney-at-Law of the State of New Jersey, authorized pursuant to N.J.S.A. 41:2-1, having identified the person(s) who executed the foregoing document and who affirmed execution of same. Assignor's Signature: Satish Chandra KILARU Attorney's Signature: _____ Date: ____ Attorney's Name: JOSEPHINE A. PALTIN, an Attorney-at-Law of the State of New Jersey, authorized pursuant to N.J.S.A. 41:2-1, having identified the person(s) who executed the foregoing document and who affirmed execution of same. Assignor's Signature: Ananda VENKATESHA Attorney's Signature: _____ Date: _____ Attorney's Name: JOSEPHINE A. PALTIN, an Attorney-at-Law of the State of New Jersey, authorized pursuant to N.J.S.A. 41:2-1, having identified the person(s) who executed the foregoing

Assignee Docket No.: 100.443.US1.160 Attorney Docket No.: COMMV.224A1

Page 4 of 4

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Attorney's Signature:	Date:
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Assignor's Signature:	K.R.	
Attorney's Signature Attorney's Name: DOSEPHINE A. PALTIN authorized pursuant to N.J.S.A. 41:2-1, having ide document and who affirmed execution of same.	Paramasivam KUMARASAMY Date:	
Assignor's Signature:	Satish Chandra KILARU	
Attorney's Signature	Date:	
Attorney's Signature: Date: Attorney's Name: JOSEPHINE A. PALTIN, an Attorney-at-Law of the State of New Jersey, authorized pursuant to N.J.S.A. 41:2-1, having identified the person(s) who executed the foregoing document and who affirmed execution of same.		
Assignor's Signature:	Annual VENIVATEGUA	
	Ananda VENKATESHA	
Attorney's Signature:	Date:	
Attorney's Name: JOSEPHINE A. PALTIN, authorized pursuant to N.J.S.A. 41:2-1, having ider document and who affirmed execution of same.	an Attorney-at-Law of the State of New Jersey, ntified the person(s) who executed the foregoing	

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Assigner will not in the future make any commitments or do any act conflicting with or impairing the Assigned Patent Rights, including, without limitation, raising any controversy, contesting, or challenging, either directly or indirectly, the validity, enforceability, or alleged infringement of any Assigned Patent Rights or assisting any third party in doing so, serving as an expert, a witness, or as a consultant in any cause of action or for any third party that is adverse to the Assigned Patent Rights, or providing a written opinion, or any other written work product, in any cause of action or for any third party that is adverse to the Assigned Patent Rights. Assignor acknowledges that there may be no adequate remedy at law for Assignor's breach of the terms set forth herein, and accordingly, Assignor grants to Assignee in addition to the right to seek monetary damages, the right to have any such breach remedied by equitable relief including, but not limited to, a temporary restraining order, preliminary injunction, permanent injunction, and such other alternative relief as may be appropriate without the necessity of Assignee posting any bond or proving any damages.

defense, and enforcement of the Assigned Patent Rights with the same legal force and effect as if executed by Assignor-

No amendment to this Assignment shall be valid unless signed in writing by the party to be bound. No course of conduct or dealing by Assignee will act as an amendment, modification, or waiver of any provision of this Assignment.

This Assignment may be executed in counterparts. This Assignment is enforceable by and inures to the benefit of Assignee and its successors and assigns.

This Assignment is effective: August 11, 2014.

Assignor's Signature:	
	Henry Wallace DORNEMANN
Attorney's Signature:	Date:
	N, an Attorney-at-Law of the State of New Jersey, entified the person(s) who executed the foregoing
Assignor's Signature:	
	Rahul S. PAWAR
Attorney's Signature:	Date:
Attorney's Name: JOSEPHINE A. PALTIN	N, an Attorney-at-Law of the State of New Jersey, entified the person(s) who executed the foregoing

Attorney's Name: JOSEPHINE A. PALTIN, an Attorney-at-Law of the State of New Jersey, authorized pursuant to N.J.S.A. 41:2-1, having identified the person(s) who executed the foregoing

Attorney's Signature: ______ Date: _____

document and who affirmed execution of same.

Ananda VENKATESHA

ASSIGNMENT BY INVENTORS

This Assignment is by the following individuals (individually and together, the "Assignor"):

- Henry Wallace DORNEMANN, a citizen of USA, and having a mailing address of 19 Russell Terrace, Eatontown, NJ 07724, USA;
- Rahul S. PAWAR, a citizen of India, and having a mailing address of 19 Barn Swallow Blvd., Marlboro, NJ 07746, USA;
- Paramasivam KUMARASAMY, a citizen of USA, and having a mailing address of 327
 Devon Place, Morganville, NJ 07751, USA;
- Satish Chandra KILARU, a citizen of India, and having a mailing address of 61 Inwood Drive, Manalapan, NJ 07726, USA; and
- Ananda VENKATESHA, a citizen of India, and having a mailing address of 34 Whittier Drive, Manalapan, NJ 07726, USA.

The Assignor invented and/or co-invented one or more inventions, contributions, concepts, ideas, developments, discoveries, processes, formulas, methods, compositions, techniques, technology, articles, machines, improvements, and all related know-how (collectively "Invention(s)") described or claimed in an application for Patent of the United States, which is currently entitled **EFFICIENTLY RESTORING EXECUTION OF A BACKED UP VIRTUAL MACHINE BASED ON COORDINATION WITH VIRTUAL MACHINE FILE RELOCATION OPERATIONS** and naming Assignor as the sole inventor(s), and filed on <u>September 22, 2014</u> as U.S. Application No. <u>14/493200</u> (the "Application"). The Assignor authorizes the Assignee, identified below, or its representatives to insert the application number and filing date of the Application after they are known.

Assignor desires to assign the entire right, title and interest in and to the Invention(s), the Application, and all related rights to CommVault Systems, Inc., a Delaware corporation having its principal place of business at 2 Crescent Place, Oceanport, New Jersey 07757 (the "Assignee") pursuant to this Assignment.

For good and valuable consideration, the receipt and sufficiency of which Assignor acknowledges, Assignor hereby presently and irrevocably assigns to Assignee the entire right, title, and interest throughout the world in and to the following (collectively, the "Assigned Patent Rights"):

- (a) the Invention(s) and Application;
- (b) all provisional patent applications relating to the Invention(s) and Application;
- (c) all patent applications claiming direct or indirect priority to the Application and/or any patents issuing from the Application that have been or may be filed or issued in the future, including divisions, continuations, and continuations-in-part;
 - (d) all patents that may be granted on any of the foregoing in clauses (a) through (c);
- (e) all rights of priority under United States law and International Conventions relating to any of the foregoing in clauses (a) through (d);
- (f) all reissues, reexaminations, *inter partes* reviews, post-grant reviews, covered business method patent reviews, supplemental examinations, renewals, substitutes, and extensions of any of the foregoing in clauses (a) through (e);
- (g) the right to file foreign and United States applications on the Invention(s), including filing directly in the name of Assignee; and

PATENT REEL: 045695 FRAME: 0042

(h) all past, present, and future: claims, causes of action, and enforcement rights for infringement or violation of any of the foregoing in clauses (a) through (f), including the right to sue and collect damages, royalties, and other remedies.

Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any official of any country, whose duty it is to issue patents on applications, to issue all patents subject to this Assignment to the Assignee.

Assignor represents that he or she has not previously assigned or licensed, or promised to assign or license, the Assigned Patent Rights to anyone other than Assignee, or taken any other action that conflicts with this Assignment or grants any immunities or rights under the Assigned Patent Rights to anyone other than Assignee.

Assignor acknowledges that he or she has been fully compensated for this Assignment and is not entitled to any future compensation or other remuneration for the Assigned Patent Rights.

Assignor agrees to communicate any facts known about the Invention(s) and promptly provide to Assignee any tangible property embodying or describing the Invention(s), which, if not presently in Assignor's possession, will be delivered to Assignee immediately upon creation thereof.

Assignor agrees to sign all documents and do such additional acts as Assignee deems reasonably necessary or desirable to file, prosecute, perfect, defend, and enforce the Assigned Patent Rights, including:

- (a) assisting in the preparation of and authorizing the filing of any other applications relating to the Assigned Patent Rights and any improvements made thereto by Assignor;
- (b) executing and making all rightful oaths, declarations, and affirmations relating to the Assigned Patent Rights; and
- (c) assisting (including by giving of testimony) in any litigation, interference, derivation, interpartes review, post-grant review, covered business method patent review, supplemental examination, exparte reexamination, and any other pre-issuance or post-issuance proceedings in any jurisdiction relating to the Assigned Patent Rights.

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This Assignment may be executed in counterparts. This Assignment is enforceable by and inures to the benefit of Assignee and its successors and assigns.

This Assignment is effective: August 11, 2014.

Assignor's Signature:	
	Henry Wallace DORNEMANN
Attorney's Signature:	Date:
•	A. PALTIN, an Attorney-at-Law of the State of New Jersey, having identified the person(s) who executed the foregoing same.
Assignor's S	Signature: Rahul S. PAWAR
	Kanui S. I AWAK
Attorney's Signature:	Date:
Attorney's Name: JOSEPHINE	A. PALTIN, an Attorney-at-Law of the State of New Jersey, having identified the person(s) who executed the foregoing

Assignee Docket No.: 100.443.US1.160 Attorney Docket No.: COMMV.224A1 Assignor's Signature: Paramasivam KUMARASAMY Attorney's Signature: _____ Date: _____ Attorney's Name: JOSEPHINE A. PALTIN, an Attorney-at-Law of the State of New Jersey, authorized pursuant to N.J.S.A. 41:2-1, having identified the person(s) who executed the foregoing document and who affirmed execution of same. Assignor's Signature: Satish Chandra KILARU Attorney's Signature: _____ Date: _____ Attorney's Name: JOSEPHINE A. PALTIN, an Attorney-at-Law of the State of New Jersey, authorized pursuant to N.J.S.A. 41:2-1, having identified the person(s) who executed the foregoing document and who affirmed execution of same.

Assignor's Signature:

Ananda VENKATESHA

Attorney's Signature:

Attorney's Name: JOSEPHINE A. PALTIN, an Attorney-at-Law of the State of New Jersey. authorized pursuant to N.J.S.A. 41:2-1, having identified the person(s) who executed the foregoing document and who affirmed execution of same.

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