

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7278562

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
MANOJ KUMAR PRADHAN	07/24/2018
HEMANT MISHRA	07/19/2018
DMITRIY BORISOVICH ZAKHARKIN	07/24/2018
SANATH KUMAR	07/24/2018
HETALKUMAR N. JOSHI	07/17/2018
SUNIL BABU TELAGAMSETTI	07/25/2018
DIVAKAR RADHAKRISHNAN	07/26/2018
JAYASREE YAKKALA	07/19/2018
ROHIT SIVADAS	07/19/2018
PAVAN KUMAR REDDY BEDADALA	07/24/2018
GOPIKANNAN VENUGOPALSAMY	07/25/2018
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:	17719831
CORRESPONDENCE DATA	
Fax Number:	(949)760-9502
<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:	949-760-0404
Email:	efiling@knobbe.com
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ATTORNEY DOCKET NUMBER:	COMMV.359A2C2
NAME OF SUBMITTER:	JOHN R. KING
SIGNATURE:	/John R. King/
DATE SIGNED:	04/13/2022

Total Attachments: 77

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ASSIGNMENT BY INVENTORS

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

- **Manoj Kumar Pradhan**, a citizen of US, and having a mailing address of 1517 Forest Haven Boulevard, Edison, NJ 08817;
- **Hemant Mishra**, a citizen of US, and having a mailing address of 2 Matlosz Ct., Englishtown, NJ 07726;
- **Dmitriy Borisovich Zakharkin**, a citizen of US, and having a mailing address of 406 Culver Road, Monmouth Junction, NJ 08852;
- **Sanath Kumar**, a citizen of India, and having a mailing address of 205, 2nd Floor, CJN Sai Enclave, 2nd Cross, Satya Sai Layout, WhiteField, Bengaluru, India, 560066;
- **Hetalkumar N. Joshi**, a citizen of US, and having a mailing address of 36 Baltusrol Drive, Manalapan, NJ 07726;
- **Sunil Babu Telagamsetti**, a citizen of India, and having a mailing address of T Sunil Babu, LIG 25, Dharma Reddy Colony, Phase II, Hyder Nagar, Kukatpally, Hyderabad, India, 500085;
- **Divakar Radhakrishnan**, a citizen of India, and having a mailing address of H.No: 1-111/2/5/C/13, Prashanth Nagar, Kothaguda, Kondapur, R.R District, Hyderabad, Telangana, India, 500084;
- **Jayasree Yakkala**, a citizen of US, and having a mailing address of 22 Willow Drive, Apt. # 7B, Ocean, NJ 07712;
- **Rohit Sivadas**, a citizen of US, and having a mailing address of 94 Lakeview Terrace, Apt. B, Eatontown, NJ 07724;
- **Pavan Kumar Reddy Bedadala**, a citizen of US, and having a mailing address of 9 Masters Blvd., Piscataway, NJ 08854;
- **Gopikannan Venugopalsamy**, a citizen of US, and having a mailing address of 781 Durshire Way, Sunnyvale, CA 94087.

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 applications for Patent of the United States listed in the table below (the "Applications"), each of which list the Assignor as inventors. The Assignor authorizes the Assignee, identified below, or its representatives to insert the application numbers and filing dates of the Applications after they are known.

Title	Application Serial No.	Filing Date	Assignee Docket No.	Attorney Docket No.
BACKUP-BASED MEDIA AGENT CONFIG	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A1
NETWORK STORAGE BACKUP USING DISTRIBUTED MEDIA AGENTS	15/969,720	05-02-2018	100.591.US2.105	COMMV.359A2
MULTI-TIERED BACKUP INDEXING	15/969,719	05-02-2018	100.591.US3.105	COMMV.359A3

BACKUP-BASED MEDIA AGENT CONFIGURATION	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A4
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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 1 Commvault Way, Tinton Falls, New Jersey 07724 USA (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
- (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, *inter partes* review, post-grant review, covered business method patent review, supplemental examination, *ex parte* reexamination, and any other pre-issuance or post-issuance proceedings in any jurisdiction relating to the Assigned Patent Rights.

Assignor 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.

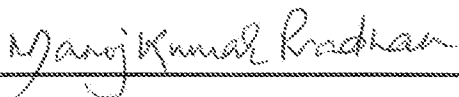
Assignor's obligation to assist Assignee in obtaining, defending, and enforcing the Assigned Patent Rights shall continue beyond the termination of employment by Assignee for whatever reason, but Assignee shall compensate Assignor at a reasonable rate after the termination of employment for time actually spent at Assignee's request providing such assistance. Assignor hereby irrevocably designates and appoints Assignee as its duly authorized agent and attorney-in-fact to act for and in Assignor's behalf to execute and file any document and to do all other lawfully permitted acts to further the prosecution, 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: September 19, 2017

Assignor's Signature:



Manoj Kumar Pradhan

Attorney's Signature:



Date:

7/24/2018

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: _____

Hemant Mishra

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: _____

Dmitriy Borisovich Zakharkin

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: _____

Sanath Kumar

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: _____

Hetalkumar N. Joshi

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: _____

Sunil Babu Telagamsetti

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Divakar Radhakrishnan

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Jayasree Yakkala

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: _____

Rohit Sivadas

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Pavan Kumar Reddy Bedadala

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Gopikannan Venugopalsamy

Attorney's Signature: _____ Date: _____

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- (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 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: September 19, 2017

Assignor's Signature: _____

Manoj Kumar Pradhan

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: _____

Hemant

Hemant Mishra

Attorney's Signature: _____

Josephine A. Paltin

Date: _____

7/19/2018

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: _____

Dmitriy Borisovich Zakharkin

Attorney's Signature: _____

Date: _____

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Assignor's Signature: _____

Sanath Kumar

Attorney's Signature: _____

Date: _____

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Assignor's Signature: _____

Hetalkumar N. Joshi

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Sunil Babu Telagamsetti

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: _____

Divakar Radhakrishnan

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: _____

Jayasree Yakkala

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: _____

Rohit Sivadas

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: _____

Pavan Kumar Reddy Bedadala

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: _____

Gopikannan Venugopalsamy

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.

25478325

ASSIGNMENT BY INVENTORS

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

- **Manoj Kumar Pradhan**, a citizen of US, and having a mailing address of 1517 Forest Haven Boulevard, Edison, NJ 08817;
- **Hemant Mishra**, a citizen of US, and having a mailing address of 2 Matlosz Ct., Englishtown, NJ 07726;
- **Dmitriy Borisovich Zakharkin**, a citizen of US, and having a mailing address of 406 Culver Road, Monmouth Junction, NJ 08852;
- **Sanath Kumar**, a citizen of India, and having a mailing address of 205, 2nd Floor, CJN Sai Enclave, 2nd Cross, Satya Sai Layout, WhiteField, Bengaluru, India, 560066;
- **Hetalkumar N. Joshi**, a citizen of US, and having a mailing address of 36 Baltusrol Drive, Manalapan, NJ 07726;
- **Sunil Babu Telagamsetti**, a citizen of India, and having a mailing address of T Sunil Babu, LIG 25, Dharma Reddy Colony, Phase II, Hyder Nagar, Kukatpally, Hyderabad, India, 500085;
- **Divakar Radhakrishnan**, a citizen of India, and having a mailing address of H.No: 1-111/2/5/C/13, Prashanth Nagar, Kothaguda, Kondapur, R.R District, Hyderabad, Telangana, India, 500084;
- **Jayasree Yakkala**, a citizen of US, and having a mailing address of 22 Willow Drive, Apt. # 7B, Ocean, NJ 07712;
- **Rohit Sivadas**, a citizen of US, and having a mailing address of 94 Lakeview Terrace, Apt. B, Eatontown, NJ 07724;
- **Pavan Kumar Reddy Bedadala**, a citizen of US, and having a mailing address of 9 Masters Blvd., Piscataway, NJ 08854;
- **Gopikannan Venugopalsamy**, a citizen of US, and having a mailing address of 781 Durshire Way, Sunnyvale, CA 94087.

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 applications for Patent of the United States listed in the table below (the "Applications"), each of which list the Assignor as inventors. The Assignor authorizes the Assignee, identified below, or its representatives to insert the application numbers and filing dates of the Applications after they are known.

Title	Application Serial No.	Filing Date	Assignee Docket No.	Attorney Docket No.
BACKUP-BASED MEDIA AGENT CONFIG	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A1
NETWORK STORAGE BACKUP USING DISTRIBUTED MEDIA AGENTS	15/969,720	05-02-2018	100.591.US2.105	COMMV.359A2
MULTI-TIERED BACKUP INDEXING	15/969,719	05-02-2018	100.591.US3.105	COMMV.359A3

BACKUP-BASED MEDIA AGENT CONFIGURATION	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A4
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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 1 Commvault Way, Tinton Falls, New Jersey 07724 USA (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
- (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, *inter partes* review, post-grant review, covered business method patent review, supplemental examination, *ex parte* reexamination, and any other pre-issuance or post-issuance proceedings in any jurisdiction relating to the Assigned Patent Rights.

Assignor 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.

Assignor's obligation to assist Assignee in obtaining, defending, and enforcing the Assigned Patent Rights shall continue beyond the termination of employment by Assignee for whatever reason, but Assignee shall compensate Assignor at a reasonable rate after the termination of employment for time actually spent at Assignee's request providing such assistance. Assignor hereby irrevocably designates and appoints Assignee as its duly authorized agent and attorney-in-fact to act for and in Assignor's behalf to execute and file any document and to do all other lawfully permitted acts to further the prosecution, 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: September 19, 2017

Assignor's Signature: _____

Manoj Kumar Pradhan

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.

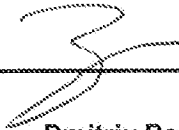
Assignor's Signature: _____

Hemant Mishra

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: _____



Dmitriy Borisovich Zakharkin

Attorney's Signature: Josephine A. Paltin Date: 7/24/2018

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: _____

Sanath Kumar

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: _____

Hetalkumar N. Joshi

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: _____

Sunil Babu Telagamsetti

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: _____

Divakar Radhakrishnan

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: _____

Jayasree Yakkala

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: _____

Rohit Sivasdas

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: _____

Pavan Kumar Reddy Bedadala

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: _____

Gopikannan Venugopalsamy

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.

25478325

ASSIGNMENT BY INVENTORS

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

- Manoj Kumar Pradhan, a citizen of US, and having a mailing address of 1517 Forest Haven Boulevard, Edison, NJ 08817;
- Hemant Mishra, a citizen of US, and having a mailing address of 2 Matlosz Ct., Englishtown, NJ 07726;
- Dmitriy Borisovich Zakharkin, a citizen of US, and having a mailing address of 406 Culver Road, Monmouth Junction, NJ 08852;
- Sanath Kumar, a citizen of India, and having a mailing address of 205, 2nd Floor, CJN Sai Enclave, 2nd Cross, Satya Sai Layout, WhiteField, Bengaluru, India, 560066;
- Hetal Kumar N. Joshi, a citizen of US, and having a mailing address of 36 Baltusrol Drive, Manalapan, NJ 07726;
- Sunil Babu Telagamsetti, a citizen of India, and having a mailing address of T Sunil Babu, LIG 25, Dharma Reddy Colony, Phase II, Hyder Nagar, Kukatpally, Hyderabad, India, 500085;
- Divakar Radhakrishnan, a citizen of India, and having a mailing address of H.No: 1-111/2/5/C/13, Prashanth Nagar, Kothaguda, Kondapur, R.R District, Hyderabad, Telangana, India, 500084;
- Jayasree Yakkala, a citizen of US, and having a mailing address of 22 Willow Drive, Apt. # 7B, Ocean, NJ 07712;
- Rohit Sivadas, a citizen of US, and having a mailing address of 34 ... Apt B, Eatontown, NJ 07724;
- Pavan Kumar Reddy Bedadala, a citizen of US, and having a mailing address of ... Masters Blvd., Piscataway, NJ 08854;
- Gopikannan Venugopalsamy, a citizen of US, and having a mailing address of 781 Durshire Way, Sunnyvale, CA 94087.

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 applications for Patent of the United States listed in the table below (the "Applications"), each of which list the Assignor as inventors. The Assignor authorizes the Assignee, identified below, or its representatives to insert the application numbers and filing dates of the Applications after they are known.

Title	Application Serial No.	Filing Date	Assignee Docket No.	Attorney Docket No.
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NETWORK STORAGE BACKUP USING DISTRIBUTED MEDIA AGENTS	15/969,720	05-02-2018	100.591.US2.105	COMMV.359A2
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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 1 Commvault Way, Tinton Falls, New Jersey 07724 USA (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);
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- (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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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: September 19, 2017

Assignor's Signature: _____

Manoj Kumar Pradhan

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: _____

Hemant Mishra

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.

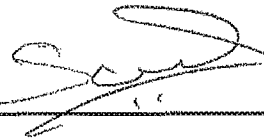
Assignor's Signature: _____

Dmitriy Borisovich Zakharkin

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: _____



Sanath Kumar

Attorney's Signature: Josephine A. Paltin Date: 7/24/2018

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: _____

Hetalkumar N. Joshi

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: _____

Sunil Babu Telagameetti

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: _____

Divakar Radhakrishnan

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: _____

Jayasree Yakkala

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: _____

Rohit Sivadas

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: _____

Pavan Kumar Reddy Bedadala

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.

Assignee Docket No.: 100.591.US1-4,105
Attorney Docket No.: COMMV.359A1-COMMV.359A4

Assignor's Signature: _____

Gopikannan Venugopalsamy

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.

25478325

ASSIGNMENT BY INVENTORS

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

- **Manoj Kumar Pradhan**, a citizen of US, and having a mailing address of 1517 Forest Haven Boulevard, Edison, NJ 08817;
- **Hemant Mishra**, a citizen of US, and having a mailing address of 2 Matlosz Ct., Englishtown, NJ 07726;
- **Dmitriy Borisovich Zakharkin**, a citizen of US, and having a mailing address of 406 Culver Road, Monmouth Junction, NJ 08852;
- **Sanath Kumar**, a citizen of India, and having a mailing address of 205, 2nd Floor, CJN Sai Enclave, 2nd Cross, Satya Sai Layout, WhiteField, Bengaluru, India, 560066;
- **Hetalkumar N. Joshi**, a citizen of US, and having a mailing address of 36 Baltusrol Drive, Manalapan, NJ 07726;
- **Sunil Babu Telagamsetti**, a citizen of India, and having a mailing address of T Sunil Babu, LIG 25, Dharma Reddy Colony, Phase II, Hyder Nagar, Kukatpally, Hyderabad, India, 500085;
- **Divakar Radhakrishnan**, a citizen of India, and having a mailing address of H.No: 1-111/2/5/C/13, Prashanth Nagar, Kothaguda, Kondapur, R.R District, Hyderabad, Telangana, India, 500084;
- **Jayasree Yakkala**, a citizen of US, and having a mailing address of 22 Willow Drive, Apt. # 7B, Ocean, NJ 07712;
- **Rohit Sivadas**, a citizen of US, and having a mailing address of 94 Lakeview Terrace, Apt. B, Eatontown, NJ 07724;
- **Pavan Kumar Reddy Bedadala**, a citizen of US, and having a mailing address of 9 Masters Blvd., Piscataway, NJ 08854;
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Title	Application Serial No.	Filing Date	Assignee Docket No.	Attorney Docket No.
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BACKUP-BASED MEDIA AGENT CONFIGURATION	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A4
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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 1 Commvault Way, Tinton Falls, New Jersey 07724 USA (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
- (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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Assignor's obligation to assist Assignee in obtaining, defending, and enforcing the Assigned Patent Rights shall continue beyond the termination of employment by Assignee for whatever reason, but Assignee shall compensate Assignor at a reasonable rate after the termination of employment for time actually spent at Assignee's request providing such assistance. Assignor hereby irrevocably designates and appoints Assignee as its duly authorized agent and attorney-in-fact to act for and in Assignor's behalf to execute and file any document and to do all other lawfully permitted acts to further the prosecution, defense, and enforcement of the Assigned Patent Rights with the same legal force and effect as if executed by Assignor.

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This Assignment is effective: September 19, 2017

Assignor's Signature: _____

Manoj Kumar Pradhan

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: _____

Hemant Mishra

Attorney's Signature: _____ Date: _____

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Dmitriy Borisovich Zakharkin

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Sanath Kumar

Attorney's Signature: _____ Date: _____

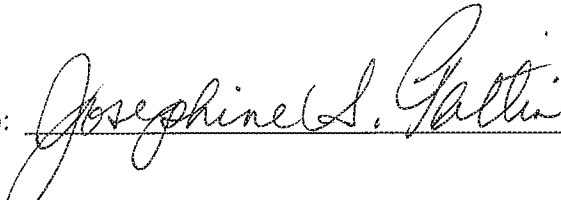
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Hetal Kumar N. Joshi

Attorney's Signature: _____



Date: _____

7/17/2018

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Sunil Babu Telagamsetti

Attorney's Signature: _____

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Divakar Radhakrishnan

Attorney's Signature: _____

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Jayasree Yakkala

Attorney's Signature: _____ Date: _____

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Rohit Sivasdas

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Pavan Kumar Reddy Bedadala

Attorney's Signature: _____ Date: _____

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Gopikannan Venugopalsamy

Attorney's Signature: _____ Date: _____

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25478325

ASSIGNMENT BY INVENTORS

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

- **Manoj Kumar Pradhan**, a citizen of US, and having a mailing address of 1517 Forest Haven Boulevard, Edison, NJ 08817;
- **Hemant Mishra**, a citizen of US, and having a mailing address of 2 Matlosz Ct., Englishtown, NJ 07726;
- **Dmitriy Borisovich Zakharkin**, a citizen of US, and having a mailing address of 406 Culver Road, Monmouth Junction, NJ 08852;
- **Sanath Kumar**, a citizen of India, and having a mailing address of 205, 2nd Floor, CJN Sai Enclave, 2nd Cross, Satya Sai Layout, WhiteField, Bengaluru, India, 560066;
- **Hetalkumar N. Joshi**, a citizen of US, and having a mailing address of 36 Baltusrol Drive, Manalapan, NJ 07726;
- **Sunil Babu Telagamsetti**, a citizen of India, and having a mailing address of T Sunil Babu, LIG 25, Dharma-Reddy Colony, Phase-II, Hyder-Nagar, Kukatpally, Hyderabad, India, 500085; *51 Country Club Rd, Apt 215, Eatontown, NJ 07724.*
- **Divakar Radhakrishnan**, a citizen of India, and having a mailing address of H.No: 1-111/2/5/C/13, Prashanth Nagar, Kothaguda, Kondapur, R.R District, Hyderabad, Telangana, India, 500084; *Tel. Red.*
- **Jayasree Yakkala**, a citizen of US, and having a mailing address of 22 Willow Drive, Apt. # 7B, Ocean, NJ 07712;
- **Rohit Sivadas**, a citizen of US, and having a mailing address of 94 Lakeview Terrace, Apt. B, Eatontown, NJ 07724;
- **Pavan Kumar Reddy Bedadala**, a citizen of US, and having a mailing address of 9 Masters Blvd., Piscataway, NJ 08854;
- **Gopikannan Venugopalsamy**, a citizen of US, and having a mailing address of 781 Durshire Way, Sunnyvale, CA 94087.

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 applications for Patent of the United States listed in the table below (the "Applications"), each of which list the Assignor as inventors. The Assignor authorizes the Assignee, identified below, or its representatives to insert the application numbers and filing dates of the Applications after they are known.

Title	Application Serial No.	Filing Date	Assignee Docket No.	Attorney Docket No.
BACKUP-BASED MEDIA AGENT CONFIG	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A1
NETWORK STORAGE BACKUP USING DISTRIBUTED MEDIA AGENTS	15/969,720	05-02-2018	100.591.US2.105	COMMV.359A2
MULTI-TIERED BACKUP INDEXING	15/969,719	05-02-2018	100.591.US3.105	COMMV.359A3

BACKUP-BASED MEDIA AGENT CONFIGURATION	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A4
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Manoj Kumar Pradhan

Attorney's Signature: _____ Date: _____

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Hemant Mishra

Attorney's Signature: _____ Date: _____

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Dmitriy Borisovich Zakharkin

Attorney's Signature: _____ Date: _____

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Sanath Kumar

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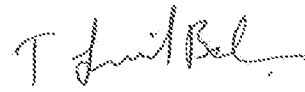
Assignor's Signature: _____

Hetalkumar N. Joshi

Attorney's Signature: _____ Date: _____

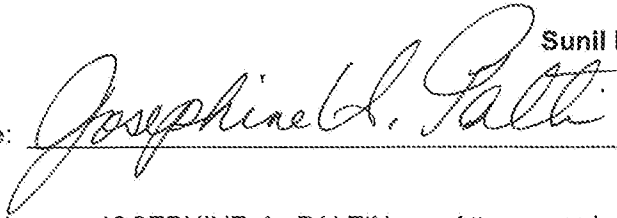
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Sunil Babu Telagamsetti

Attorney's Signature: _____



Date: _____

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Divakar Radhakrishnan

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Gopikannan Venugopalsamy

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Manoj Kumar Pradhan

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: _____

Hemant Mishra

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: _____

Dmitriy Borisovich Zakharkin

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: _____

Sanath Kumar

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: _____

Hetalkumar N. Joshi

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: _____

Sunil Babu Telagamsetti

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

R. DIVAKAR

Divakar Radhakrishnan

Attorney's Signature: _____ Date: _____

7/26/2018

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: _____

Jayasree Yakkala

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: _____

Rohit Sivas

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: _____

Pavan Kumar Reddy Bedadala

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.

Assignee Docket No.: 100.591.US1-4.105
Attorney Docket No.: COMMV.359A1-COMMV.359A4

Assignor's Signature: _____

Gopikannan Venugopalsamy

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.

25478325

ASSIGNMENT BY INVENTORS

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

- **Manoj Kumar Pradhan**, a citizen of US, and having a mailing address of 1517 Forest Haven Boulevard, Edison, NJ 08817;
- **Hemant Mishra**, a citizen of US, and having a mailing address of 2 Matlosz Ct., Englishtown, NJ 07726;
- **Dmitriy Borisovich Zakharkin**, a citizen of US, and having a mailing address of 406 Culver Road, Monmouth Junction, NJ 08852;
- **Sanath Kumar**, a citizen of India, and having a mailing address of 205, 2nd Floor, CJN Sai Enclave, 2nd Cross, Satya Sai Layout, WhiteField, Bengaluru, India, 560066;
- **Hetaikumar N. Joshi**, a citizen of US, and having a mailing address of 36 Baltusrol Drive, Manalapan, NJ 07726;
- **Sunil Babu Telagamsetti**, a citizen of India, and having a mailing address of T Sunil Babu, LIG 25, Dharma Reddy Colony, Phase II, Hyder Nagar, Kukatpally, Hyderabad, India, 500085;
- **Divakar Radhakrishnan**, a citizen of India, and having a mailing address of H.No: 1-111/2/5/C/13, Prashanth Nagar, Kothaguda, Kondapur, R.R District, Hyderabad, Telangana, India, 500084;
- **Jayasree Yakkala**, a citizen of US, and having a mailing address of 22 Willow Drive, Apt. # 7B, Ocean, NJ 07712;
- **Rohit Sivadas**, a citizen of US, and having a mailing address of 94 Lakeview Terrace, Apt. B, Eatontown, NJ 07724;
- **Pavan Kumar Reddy Bedadala**, a citizen of US, and having a mailing address of 9 Masters Blvd., Piscataway, NJ 08854;
- **Gopikannan Venugopalsamy**, a citizen of US, and having a mailing address of 781 Durshire Way, Sunnyvale, CA 94087.

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 applications for Patent of the United States listed in the table below (the "Applications"), each of which list the Assignor as inventors. The Assignor authorizes the Assignee, identified below, or its representatives to insert the application numbers and filing dates of the Applications after they are known.

Title	Application Serial No.	Filing Date	Assignee Docket No.	Attorney Docket No.
BACKUP-BASED MEDIA AGENT CONFIG	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A1
NETWORK STORAGE BACKUP USING DISTRIBUTED MEDIA AGENTS	15/969,720	05-02-2018	100.591.US2.105	COMMV.359A2
MULTI-TIERED BACKUP INDEXING	15/969,719	05-02-2018	100.591.US3.105	COMMV.359A3

BACKUP-BASED MEDIA AGENT CONFIGURATION	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A4
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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 1 Commvault Way, Tinton Falls, New Jersey 07724 USA (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
- (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, *inter partes* review, post-grant review, covered business method patent review, supplemental examination, *ex parte* reexamination, and any other pre-issuance or post-issuance proceedings in any jurisdiction relating to the Assigned Patent Rights.

Assignor 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.

Assignor's obligation to assist Assignee in obtaining, defending, and enforcing the Assigned Patent Rights shall continue beyond the termination of employment by Assignee for whatever reason, but Assignee shall compensate Assignor at a reasonable rate after the termination of employment for time actually spent at Assignee's request providing such assistance. Assignor hereby irrevocably designates and appoints Assignee as its duly authorized agent and attorney-in-fact to act for and in Assignor's behalf to execute and file any document and to do all other lawfully permitted acts to further the prosecution, 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: September 19, 2017

Assignor's Signature: _____

Manoj Kumar Pradhan

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: _____

Hemant Mishra

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Dmitriy Borisovich Zakharkin

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Sanath Kumar

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: _____

Hetalkumar N. Joshi

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Sunil Babu Telagamsetti

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Divakar Radhakrishnan

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: _____

M. Jayasree

Jayasree Yakkala

Attorney's Signature: _____

Josephine A. Paltin

Date: _____

7/19/2018

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: _____

Rohit Sivadas

Attorney's Signature: _____

Date: _____

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Assignor's Signature: _____

Pavan Kumar Reddy Bedadaia

Attorney's Signature: _____

Date: _____

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Assignor's Signature: _____

Gopikannan Venugopalsamy

Attorney's Signature: _____ Date: _____

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25478325

ASSIGNMENT BY INVENTORS

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

- **Manoj Kumar Pradhan**, a citizen of US, and having a mailing address of 1517 Forest Haven Boulevard, Edison, NJ 08817;
- **Heimant Mishra**, a citizen of US, and having a mailing address of 2 Matlosz Ct., Englishtown, NJ 07726;
- **Dmitriy Borisovich Zakharkin**, a citizen of US, and having a mailing address of 406 Culver Road, Monmouth Junction, NJ 08852;
- **Sanath Kumar**, a citizen of India, and having a mailing address of 205, 2nd Floor, CJN Sai Enclave, 2nd Cross, Satya Sai Layout, WhiteField, Bengaluru, India, 560066;
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- **Gopikannan Venugopalsamy**, a citizen of US, and having a mailing address of 781 Durshire Way, Sunnyvale, CA 94087.

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 applications for Patent of the United States listed in the table below (the "Applications"), each of which list the Assignor as inventors. The Assignor authorizes the Assignee, identified below, or its representatives to insert the application numbers and filing dates of the Applications after they are known.

Title	Application Serial No.	Filing Date	Assignee Docket No.	Attorney Docket No.
BACKUP-BASED MEDIA AGENT CONFIG	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A1
NETWORK STORAGE BACKUP USING DISTRIBUTED MEDIA AGENTS	15/969,720	05-02-2018	100.591.US2.105	COMMV.359A2
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- (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;
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- (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.

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This Assignment is effective: September 19, 2017

Assignor's Signature: _____

Manoj Kumar Pradhan

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: _____

Hemant Mishra

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Dmitriy Borisovich Zakharkin

Attorney's Signature: _____ Date: _____

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Sanath Kumar

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Hetaikumar N. Joshi

Attorney's Signature: _____ Date: _____

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Sunil Babu Telagamsetti

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Divakar Radhakrishnan

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Jayasree Yakkala

Attorney's Signature: _____ Date: _____

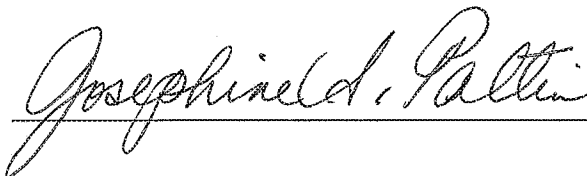
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Assignor's Signature: _____



Rohit Sivas

Attorney's Signature: _____



Date: _____

7/19/2018

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: _____

Pavan Kumar Reddy Bedadala

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Gopikannan Venugopalsamy

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.

25478325

ASSIGNMENT BY INVENTORS

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

- **Manoj Kumar Pradhan**, a citizen of US, and having a mailing address of 1517 Forest Haven Boulevard, Edison, NJ 08817;
- **Hemant Mishra**, a citizen of US, and having a mailing address of 2 Matiosz Ct., Englishtown, NJ 07726;
- **Dmitriy Borisovich Zakharkin**, a citizen of US, and having a mailing address of 406 Culver Road, Monmouth Junction, NJ 08852;
- **Sanath Kumar**, a citizen of India, and having a mailing address of 205, 2nd Floor, CJN Sai Enclave, 2nd Cross, Satya Sai Layout, WhiteField, Bengaluru, India, 560066;
- **Hetalkumar N. Joshi**, a citizen of US, and having a mailing address of 36 Baltusrol Drive, Manalapan, NJ 07726;
- **Sunil Babu Telagamsetti**, a citizen of India, and having a mailing address of T Sunil Babu, LIG 25, Dharma Reddy Colony, Phase II, Hyder Nagar, Kukatpally, Hyderabad, India, 500085;
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- **Rohit Sivasdas**, a citizen of US, and having a mailing address of 94 Lakeview Terrace, Apt. B, Eatontown, NJ 07724;
- **Pavan Kumar Reddy Bedadala**, a citizen of US, and having a mailing address of 9 Masters Blvd., Piscataway, NJ 08854;
- **Gopikannan Venugopalsamy**, a citizen of US, and having a mailing address of 781 Durshire Way, Sunnyvale, CA 94087.

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 applications for Patent of the United States listed in the table below (the "Applications"), each of which list the Assignor as inventors. The Assignor authorizes the Assignee, identified below, or its representatives to insert the application numbers and filing dates of the Applications after they are known.

Title	Application Serial No.	Filing Date	Assignee Docket No.	Attorney Docket No.
BACKUP-BASED MEDIA AGENT CONFIG	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A1
NETWORK STORAGE BACKUP USING DISTRIBUTED MEDIA AGENTS	15/969,720	05-02-2018	100.591.US2.105	COMMV.359A2
MULTI-TIERED BACKUP INDEXING	15/969,719	05-02-2018	100.591.US3.105	COMMV.359A3

BACKUP-BASED MEDIA AGENT CONFIGURATION	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A4
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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 1 Commvault Way, Tinton Falls, New Jersey 07724 USA (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
- (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, *inter partes* review, post-grant review, covered business method patent review, supplemental examination, *ex parte* reexamination, and any other pre-issuance or post-issuance proceedings in any jurisdiction relating to the Assigned Patent Rights.

Assignor 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.

Assignor's obligation to assist Assignee in obtaining, defending, and enforcing the Assigned Patent Rights shall continue beyond the termination of employment by Assignee for whatever reason, but Assignee shall compensate Assignor at a reasonable rate after the termination of employment for time actually spent at Assignee's request providing such assistance. Assignor hereby irrevocably designates and appoints Assignee as its duly authorized agent and attorney-in-fact to act for and in Assignor's behalf to execute and file any document and to do all other lawfully permitted acts to further the prosecution, 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: September 19, 2017

Assignor's Signature: _____

Manoj Kumar Pradhan

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: _____

Hemant Mishra

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: _____

Dmitriy Borisovich Zakharkin

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: _____

Sanath Kumar

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: _____

Hetalkumar N. Joshi

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: _____

Sunil Babu Telagamsetti

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: _____

Divakar Radhakrishnan

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: _____

Jayasree Yakkala

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.

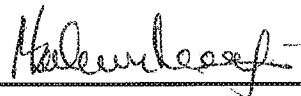
Assignor's Signature: _____

Rohit Sivadas

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: _____



Pavan Kumar Reddy Bedadala

Attorney's Signature: _____



Date: _____

7/24/2018

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: _____

Gopikannan Venugopalsamy

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.

25478325

ASSIGNMENT BY INVENTORS

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

- **Manoj Kumar Pradhan**, a citizen of US, and having a mailing address of 1517 Forest Haven Boulevard, Edison, NJ 08817;
- **Hemant Mishra**, a citizen of US, and having a mailing address of 2 Matlosz Ct., Englishtown, NJ 07726;
- **Dmitriy Borisovich Zakharkin**, a citizen of US, and having a mailing address of 406 Culver Road, Monmouth Junction, NJ 08852;
- **Sanath Kumar**, a citizen of India, and having a mailing address of 205, 2nd Floor, CJN Sai Enclave, 2nd Cross, Satya Sai Layout, WhiteField, Bengaluru, India, 560086;
- **Hetaikumar N. Joshi**, a citizen of US, and having a mailing address of 36 Baltusrol Drive, Manalapan, NJ 07726;
- **Sunil Babu Telagamsetti**, a citizen of India, and having a mailing address of T Sunil Babu, LIG 25, Dharma Reddy Colony, Phase II, Hyder Nagar, Kukatpally, Hyderabad, India, 500085;
- **Divakar Radhakrishnan**, a citizen of India, and having a mailing address of H.No: 1-111/2/5/C/13, Prashanth Nagar, Kothaguda, Kondapur, R.R District, Hyderabad, Telangana, India, 500084;
- **Jayasree Yakkala**, a citizen of US, and having a mailing address of 22 Willow Drive, Apt. # 7B, Ocean, NJ 07712;
- **Rohit Sivadas**, a citizen of US, and having a mailing address of 94 Lakeview Terrace, Apt. B, Eatontown, NJ 07724;
- **Pavan Kumar Reddy Bedadala**, a citizen of US, and having a mailing address of 9 Masters Blvd., Piscataway, NJ 08854;
- **Gopikannan Venugopalsamy**, a citizen of US, and having a mailing address of 781 Durshire Way, Sunnyvale, CA 94087.

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 applications for Patent of the United States listed in the table below (the "Applications"), each of which list the Assignor as inventors. The Assignor authorizes the Assignee, identified below, or its representatives to insert the application numbers and filing dates of the Applications after they are known.

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BACKUP-BASED MEDIA AGENT CONFIG	15/969,727	05-02-2018	100.591.US4.105	COMMV.359A1
NETWORK STORAGE BACKUP USING DISTRIBUTED MEDIA AGENTS	15/969,720	05-02-2018	100.591.US2.105	COMMV.359A2
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- (b) all provisional patent applications relating to the invention(s) and Application
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- (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 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: September 19, 2017

Assignor's Signature: _____

Manoj Kumar Pradhan

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: _____

Hemant Mishra

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: _____

Dmitriy Borisovich Zakharkin

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Sanath Kumar

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Hetalkumar N. Joshi

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Sunil Babu Telagamsetti

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Divakar Radhakrishnan

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Jayasree Yakkala

Attorney's Signature: _____ Date: _____

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Assignor's Signature: _____

Rohit Sivadas

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.

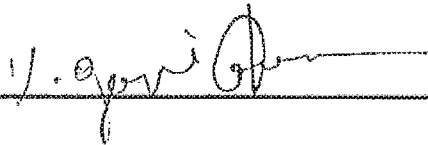
Assignor's Signature: _____

Pavan Kumar Reddy Bedadala

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:



Gopikannan Venugopalsamy

Attorney's Signature: _____



Date:

7/25/2018

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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