505894691 01/31/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5941392

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PAVAN KUMAR REDDY BEDADALA	02/13/2018
PRAVEEN VEERAMACHANENI	02/13/2018

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:	16776292

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

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

Address Line 1: 2040 MAIN STREET

Address Line 2: 14TH FLOOR

Address Line 4: IRVINE, CALIFORNIA 92614

ATTORNEY DOCKET NUMBER:	COMMV.363A1C1
NAME OF SUBMITTER:	VIKAS BHARGAVA
SIGNATURE:	/Vikas Bhargava/
DATE SIGNED:	01/31/2020

Total Attachments: 6

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PATENT REEL: 051689 FRAME: 0526

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PATENT REEL: 051689 FRAME: 0527 Assignee Docket No.: 100.586.US1-US2.120 Attorney Docket No.: COMMV.363A1-363A2

ASSIGNMENT BY INVENTORS

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

- Pavan Kumar Reddy BEDADALA, a citizen of India, and having a mailing address of 9
 Masters Blvd., Piscataway, NJ 08854, USA.
- Praveen VEERAMACHANENI, a citizen of India, and having a mailing address of 521 Manchester Place, Morganville, NJ 07751, 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 the 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.
MACHINE-LEARNING BASED DATA OBJECT STORAGE	15/896,943	Feb. 14, 2018	100.586.US1.120	COMMV.363A1
MACHINE-LEARNING BASED DATA OBJECT RETRIEVAL	15/897,021	Feb. 14, 2018	100.586.US2.120	COMMV.363A2

Assignor desires to assign the entire right, title and interest in and to the Invention(s), the Applications, 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 Applications;
- (b) all provisional patent applications relating to the Invention(s) and Applications:
- (c) all patent applications claiming direct or indirect priority to the Applications and/or any patents issuing from the Applications 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

Page 1 of 3

Assignes Docket No.: 100,586.US1-US2.120 Attorney Docket No.: COMMV.363A1-363A2

(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, 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.

Assignee Docket No.: 100.586.US1-US2.120 Attorney Docket No.: COMMV.363A1-363A2

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 incres to the benefit of Assignee and its successors and assigns.

This Assignment is effective: September 19, 2017:

Assignor's Signature:	Malusteya
Attorney's Signature: Attorney's Name: JOSEPHINE A. PALTIN, a authorized pursuant to N.J.S.A. 41:2-1, having ident document and who affirmed execution of same.	Paván Kumar Reddy BEDADALA Date: Felo 13_20/8 An Attorney-at-Law of the State of New Jersey, ified the person(s) who executed the foregoing
Assignor's Signature:	
	Praveen VEERAMACHANENI
Aftorney's Signature:	
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Page 1 of 3

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Assignee Docket No.: 100,586,US1-US2,120 Attorney Docket No.: COMMV,363A1-363A2

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Assignor's Signature:	
	Pavan Kumar Reddy BEDADALA
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Attomey's Name: JOSEPHINE A. PAL	.TIN, an Attorney-at-Law of the State of New Jersey, identified the person(s) who executed the foregoing
Assignor's Signatui	re: <u></u>
	Preveen VEERAMACHANENI
ttorney's Signature: / Myslinel	Shilt 0000 Feb (3, 20
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