506087948 06/03/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6134666

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ERIC KNAUFT	06/02/2020
ENNING XIANG	05/12/2020
MANSI SHAH	05/27/2020
PASCAL RENAULD	05/12/2020
YIQI XU	05/12/2020
OJAN THORNYCROFT	05/12/2020
PRATIK DESAI	05/12/2020
ZHIHAO YAO	05/12/2020
YIZHOU LUO	05/12/2020

RECEIVING PARTY DATA

Name:	VMWARE, INC.
Street Address:	3401 HILLVIEW AVENUE
City:	PALO ALTO
State/Country:	CALIFORNIA
Postal Code:	94304

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16875624

CORRESPONDENCE DATA

Fax Number: (650)427-4818

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: 650-427-5000

Email: ipadmin@vmware.com,eden.stright@bjfip.com,VMware@blackhillsip.com

VMWARE, INC. **Correspondent Name:**

Address Line 1: 3401 HILLVIEW AVENUE

Address Line 4: PALO ALTO, CALIFORNIA 94304

ATTORNEY DOCKET NUMBER: G521

NAME OF SUBMITTER: EDEN U.I. STRIGHT

PATENT REEL: 052820 FRAME: 0531 506087948

SIGNATURE:	/Eden U.I. Stright/
DATE SIGNED:	06/03/2020
Total Attachments: 10	
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PATENT REEL: 052820 FRAME: 0532

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, an ASSIGNOR named below,

Esta Kara O	- C	Can Francisco California
Eric Knauft	of	San Francisco, California
Enning Xiang	of	San Jose, California
Mansi Shah	of	San Jose, California
Pascal Renauld	of	Palo Alto, California
Yiqi Xu	of	Redwood City, California
Ojan Thornycroft	of	Los Altos, California
Pratik Desai	of	San Jose, California
Zhihao Yao	of	Cupertino, California
Yizhou Luo	of	Mountain View, California

hereby sell, assign, transfer and set over to

ASSIGNEE: VMware, Inc., a Delaware corporation, having a principal place of business at 3401 Hillview Avenue, Palo Alto, California 94304, U.S.A. (VMware), its successors, assigns and legal representatives,

my entire right, title and interest throughout the world, including all rights to claim priority, in and to the invention(s) disclosed in:

_	U.S. Patent Application executed on or about the date of this Assignment,			
_	U.S. Patent Application No.:	, filed on		
_	U.S. Provisional Application No.:	; filed on;		
_	_ International Application No.: PCT/	, filed on		
and				

ENTITLED: SYNCHRONIZING A STALE COMPONENT OF A DISTRIBUTED OBJECT USING A DELTA COMPONENT DURING MAINTENANCE

and identified by Attorney Docket Number: G521

and naming inventor(s) as follows:

INVENTOR(S): Enning Xiang, Eric Knauft, Mansi Shah, Pascal Renauld, Yiqi Xu, Ojan Thornycroft, Pratik Desai, Zhihao Yao, Yizhou Luo

including without limitation, my entire right, title and interest in and to any and all United States and foreign applications (including any and all provisional, international, regional and foreign national applications) for said invention(s), including divisionals, continuations, continuations-in-part, renewals, substitutes and extensions thereof, and in and to any and all patents of every country or region that may be granted or have been granted for said invention(s), including any reissues and reexaminations thereof –the foreign applications including, without limitation, all applications for patents, utility models and designs which may hereafter be filed for the invention(s) in any country or countries foreign to the United States, and all forms of industrial property protection, including, without limitation, patents, utility

models, inventor's certificates and designs which may be granted for the invention(s) in any country or countries foreign to the United States and all extensions, renewals and reissues thereof.

I authorize ASSIGNEE to apply for patents of foreign countries for said invention(s); to claim all rights of priority without further authorization from me, which priority rights include rights derived from any United States application (provisional or otherwise) under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and to own in its own name all applications, all patents and inventor's certificates in all countries based on the invention(s).

I agree to execute any and all documents requested by ASSIGNEE, its successors, assigns, legal representatives, or nominees, at their reasonable expense, in connection with filing and prosecution of any and all United States and foreign applications (including international, regional, and foreign national applications), enforcement of all patents, and maintenance of all rights in the invention(s), patents, inventor's certificates and applications for patents or inventor's certificates based on any of the invention(s); and generally to do everything possible to aid ASSIGNEE, its successors, assigns, legal representatives, and nominees, at their request and reasonable expense, in obtaining, enforcing, and maintaining patents and inventor's certificates for said invention(s) in all countries. In particular, I agree to provide to ASSIGNEE, its successors, assigns, legal representatives, or nominees, at their request and at their reasonable expense, all information known to or ascertainable by me and all documents and other materials and objects pertaining to the invention(s) that are in the possession of or accessible to me; and further, at any trial, hearing, deposition or other legal proceeding where I am called as a witness by ASSIGNEE, its successors, assigns, legal representatives, or nominee, I agree to testify to all facts pertaining to the invention(s) for which I am competent to testify.

I hereby covenant that I have full right to convey the entire interest that is being assigned by this Assignment, and that no assignment, sale, license, agreement, or encumbrance has been or will be made or entered into that would conflict with this Assignment.

I authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue any U.S. Letters Patent or any other patent or property right that may be granted for said invention(s) to ASSIGNEE, its successors or assigns.

Executed on _		by _	Enie Ymanft
	Date		Eric Knauft
Executed on _	Date	by _	Enning Xiang
Executed on	,	by _	
	Date		Mansi Shah

models, inventor's certificates and designs which may be granted for the invention(s) in any country or countries foreign to the United States and all extensions, renewals and reissues thereof.

Lauthorize ASSIGNEE to apply for patents of foreign countries for said invention(s); to claim all rights of priority without further authorization from me, which priority rights include rights derived from any United States application (provisional or otherwise) under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and to own in its own name all applications, all patents and inventor's certificates in all countries based on the invention(s).

I agree to execute any and all documents requested by ASSIGNEE, its successors, assigns, legal representatives, or nominees, at their reasonable expense, in connection with filing and prosecution of any and all United States and foreign applications (including international, regional, and foreign national applications), enforcement of all patents, and maintenance of all rights in the invention(s), patents, inventor's certificates and applications for patents or inventor's certificates based on any of the invention(s), and generally to do everything possible to aid ASSIGNEE, its successors, assigns, legal representatives, and nominees, at their request and reasonable expense, in obtaining enforcing and maintaining patents and inventor's certificates for said invention(s) in all countries. In particular, Lagree to provide to ASSIGNEE, its successors, assigns, legal representatives, or nonlinees, at their request and at their reasonable expense, all information known to or ascertainable by me and all documents and other materials and objects pertaining to the invention(s) that are in the possession of or accessible to me; and further, at any trial, hearing, deposition or other legal proceeding where I am called as a witness by ASSIGNEE, its successors, assigns, legal representatives, or nominee. Lagree to testify to all facts perfaming to the invention(s) for which I am competent to testify.

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I substrate and request the Commissioner of Patents and Trademarks of the Limited States, and any official of any country or countries foreign to the Limited States, whose only it is to issue patents or once explained or forms of industrial property projection on applications as aforesaid to issue any U.S. Letters Patent or any other patent or property right that may be granted for said meantons to ASSIGNEL to succession or use in

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	Date		hana	PATEN	IT
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models, inventor's certificates and designs which may be granted for the invention(s) in any country or countries foreign to the United States and all extensions, renewals and reissues thereof.

I authorize ASSIGNEE to apply for patents of foreign countries for said invention(s); to claim all rights of priority without further authorization from me, which priority rights include rights derived from any United States application (provisional or otherwise) under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and to own in its own name all applications, all patents and inventor's certificates in all countries based on the invention(s).

I agree to execute any and all documents requested by ASSIGNEE, its successors, assigns, legal representatives, or nominees, at their reasonable expense, in connection with filing and prosecution of any and all United States and foreign applications (including international, regional, and foreign national applications), enforcement of all patents, and maintenance of all rights in the invention(s), patents, inventor's certificates and applications for patents or inventor's certificates based on any of the invention(s); and generally to do everything possible to aid ASSIGNEE, its successors, assigns, legal representatives, and nominees, at their request and reasonable expense, in obtaining, enforcing, and maintaining patents and inventor's certificates for said invention(s) in all countries. In particular, I agree to provide to ASSIGNEE, its successors, assigns, legal representatives, or nominees, at their request and at their reasonable expense, all information known to or ascertainable by me and all documents and other materials and objects pertaining to the invention(s) that are in the possession of or accessible to me; and further, at any trial, hearing, deposition or other legal proceeding where I am called as a witness by ASSIGNEE, its successors, assigns, legal representatives, or nominee. I agree to testify to all facts pertaining to the invention(s) for which I am competent to testify.

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Executed on	_, by
Date	Eric Knauft
Executed on	, by
Date	Enning Xiang
	O
Executed on 05/27/2020	, by
Date	Mansi Shah

ASSIGNMENT

Executed on _	05 12 2070 Date	, by .	201
	Date		Pascal Renauld
Executed on _	Date	, by	Viai Vi
	Date		1 lqi Att
Executed on _	Date	, by	
	Date		Ojan Thornycroft
Executed on _		, by	
4	Date		Pratik Desai
Executed on		, by	
	Date		Zhihao Yao
Executed on _	Date	, by	
	Date		Yizhou Luo

Page 3 of 3

Executed on _		, by .	
	Date		Pascal Renauld
Executed on _	05/12/2020 Date	, by ₋	Yiqi Xu
Executed on _	Date		
Executed on _	Date	, by .	Pratik Desai
Executed on _	Date	, by .	Zhihao Yao
Executed on _	Date	, by <u>.</u>	Yizhou Luo

Executed on	, by
Date	Pascal Renauld
Executed on	, by
Date	Yiqi Xu
Executed on 05/12/2020	. by
Date	Ojan Thornycroft
Executed on	, by
Date	Pratik Desai
Executed on	, by
Date	Zhihao Yao
Executed on	, by
	Yizhou Luo

Executed on	, by
Date	Pascal Renauld
Executed onDate	, by
Date	Yiqi Xu
Executed on	, by
Executed on Date	Ojan Thornycroft
Executed on 05/12/2020	by Ludden by
Date	Pratik Desai
Executed on	, by
Date	Zhihao Yao
Executed on	, by
Date	Yizhou Luo

Executed on		, by	
_	Date	, , <u>-</u>	Pascal Renauld
Executed on _	Date	, by _	Yiai Xu
Executed on _	Date	, by _	Ojan Thornycroft
Executed on _	Date	, by _	Pratik Desai
Executed on _	5/12/2020 Date	, by _	Zhihao Yao
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	Date		Pascal Renauld
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	Date		Yiqi Xu
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	Date	_,	Pratik Desai
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	Date		Zhihao Yao
Executed on _	05/12/2020	_, by _	. Yizhou Luo
	Date		Yizhou Luo