# 505766453 11/11/2019

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5813269

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
WENGUANG WANG	10/29/2019
MOUNESH BADIGER	11/05/2019
ABHAY KUMAR JAIN	10/29/2019
JUNLONG GAO	10/29/2019
ZHAOHUI GUO	11/04/2019
RICHARD P. SPILLANE	11/04/2019

## **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:	16679570

## **CORRESPONDENCE DATA**

Fax Number:

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.

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**Email:** rross@pattersonsheridan.com, psdocketing@pattersonsheridan.com,

ipadmin@vmware.com, VMware@blackhillsip.com

Correspondent Name: PATTERSON & SHERIDAN, LLP - VMWARE

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ATTORNEY DOCKET NUMBER:	F568
NAME OF SUBMITTER:	ANKUR GARG
SIGNATURE:	/Ankur Garg/
DATE SIGNED:	11/11/2019

PATENT 505766453 REEL: 050970 FRAME: 0020

# Total Attachments: 9 source=F568\_Assignment#page1.tif source=F568\_Assignment#page2.tif source=F568\_Assignment#page3.tif source=F568\_Assignment#page4.tif source=F568\_Assignment#page5.tif source=F568\_Assignment#page6.tif source=F568\_Assignment#page7.tif source=F568\_Assignment#page8.tif source=F568\_Assignment#page8.tif

PATENT REEL: 050970 FRAME: 0021

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

Wenguang WANG	of	Santa Clara, California	,
Mounesh BADIGLR	of i	Karnatka, India	·
Abhay Kumar JAIN	01	Cupertino, California	
Juntong GAO	of`	Mountain View, California	
Guo ZHAOHU I	of	Shanghai, China	
Richard P SPILLANE	0[	Mountain View, California	

hereby sell, assign, transfer and set over to

ASSIGNET VMware, Inc., a Delaware a Corporation, having a principal place of business at 3401 Hillview Avenue, Palo Alto, California 94304, 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:

	International Application No.:	, filed on	A MANAGEMENT OF CHILDREN AND AND AND AND AND AND AND AND AND AN		
	U.S. Provisional Application N	o.: , filed on			
norman on	U.S. Patent Application No.:	. filed on			
	U.S. Patent Application execut	uted on or about the date of this Assignment.			

ard

ENTERED: SYSTEM AND METHOD OF A HIGHLY CONCURRENT CACHE REPLACEMENT ALGORITHM

and identified by Attorney Docket Number: F568

and naming inventor(s) as follows:

INVENTOR(S): Wenguang WANG

Mounesh BADIGER Abhay Kumar JAIN Junlong GAO Guo ZHAOHUI Richard P. SPILLANE

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

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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.

Lauthorize ASSIGNET 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)

Lagree to execute any and all documents requested by ASSIGNFE, 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 ASSIGNEL. 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. Lagree 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.

Lauthorize 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 ASSIGNEL, its successors or assigns.

Executed on	10/29/14	, by	11.518
	Date		Wenguang WANG
Executed on		, by	
	Date		Mounesh BADIGER
Executed on	10/29/1019	. by	Abhay Kumar JAIN
	Date		Abnay Kumar JAIN

ASSIGNMENT			1 1 1
Executed on	Oct 29, 2019 Date	, by	Sunlong GAO
Executed on	Date	. by	GuoZHAOHUZ,
Executed on	1: /4 / 19 Date	, by _(_	Richard P. SPILLANF

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

Wenguang WANG	of	Santa Clara, California
Mounesh BADIGER	of	Bengaluru, India
Abhay Kumar JAIN	of	Cupertino, California
Junlong GAO	of	Mountain View, California
Zhaohui GUO	of	Shanghai, China
Richard P. SPILLANE	of	Mountain View, California

hereby sell, assign, transfer and set over to

ASSIGNEE: VMware, Inc., a Delaware a Corporation, having a principal place of business at 3401 Hillview Avenue, Palo Alto, California 94304, 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	, filed on			
and				
ENTITLED: SYSTEM AND METHOD	OF A HIGHLY CONCURRENT CACHE			

REPLACEMENT ALGORITHM

and identified by Attorney Docket Number: F568

and naming inventor(s) as follows:

INVENTOR(S): Wenguang WANG

Mounesh BADIGER Abhay Kumar JAIN Junlong GAO Guo ZHAOHUI Richard P. SPILLANE

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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 optaining, 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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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		
	Date		Wenguang WANG	
Executed on	NOV. 05,2019	, by	Kast!	
	Date	THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSONS AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSONS AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO PERSON NAMED I	Mounesh BADIGER	
Executed on		_ , by _		
	Date		Abhay Kumar JAIN	

Executed on		by	
	Date	Junlong GAO	a tanar a mag
Executed on		. by	
	Date	Guo ZHAOHUI	energy to be a first of the consequences.
Executed on		, by	
	Date	Richard P. SPILLANE	

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Zhaohui GUO	of	Shanghai, China
Richard P. SPILLANE	of	Mountain View, California

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F568

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	X	U.S. Patent Application executed on or about the date of this Assignment.				
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_		International Application No.:		, filed on		
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		INVENTOR(S):	Wenguang WANG			

Abhay Kumar JAIN Junlong GAO Zhaohui GUO

Mounesh BADIGER

Richard P. SPILLANE

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Executed on		, by	
	Date	Wenguang W	ANG
Executed on		. by	
	Date	Mounesh BAI	DIGER
Executed on		. by	
	Date	Abhay Kumar	JAIN

PATENT REEL: 050970 FRAME: 0029

Executed on				, by		
-	Date			-	Junlong GAO	
Executed on	Nov	4th,	2019	, by	Zhaohui Guo	
-	Date			-	Zhaohui GUO	
Executed on				. by		
-	Date				Richard P. SPILLANE	

Page 3 of 3 PATENT REEL: 050970 FRAME: 0030

**RECORDED: 11/11/2019**