503585017 11/25/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3631646

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------|----------------|
| MANOJ KRISHNAN | 10/14/2015 |
| JOANNE REN | 09/28/2015 |
| KEITH FARKAS | 10/14/2015 |
| IGOR TARASHANSKY | 10/07/2015 |
| ELISHA ZISKIND | 04/07/2014 |

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: | 13975133 |

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: 650-427-1049

Email: ipadmin@vmware.com

Correspondent Name: VMWARE, INC.
Address Line 1: DARRYL SMITH
Address Line 2: 3401 HILLVIEW AVE.

Address Line 4: PALO ALTO, CALIFORNIA 94304

| NAME OF SUBMITTER: HOLLI L. TEMPLETON SIGNATURE: /Holli L. Templeton/ DATE SIGNED: 11/25/2015 | ATTORNEY DOCKET NUMBER: | B060 |
|--|-------------------------|----------------------|
| The state of the s | NAME OF SUBMITTER: | HOLLI L. TEMPLETON |
| DATE SIGNED: 11/25/2015 | SIGNATURE: | /Holli L. Templeton/ |
| 11/20/2010 | DATE SIGNED: | 11/25/2015 |

Total Attachments: 6



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

| Manoj Krishnan | of | Sunnyvale, California |
|------------------|----|------------------------|
| Joanne Ren | of | Cupertino, California |
| Keith Farkas | of | San Carlos, California |
| lgor Tarashansky | of | Concord, Massachusetts |
| Elisha Ziskind | of | Sharon, Massachusetts |

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:

| X U.S. Patent Applic | ation executed on or a | bout the date of this Assignn | ient, |
|---------------------------|------------------------|---------------------------------|--|
| U.S. Patent Applic | ation No.: | , filed on | |
| X U.S. Provisional A | pplication No.: 61/69 | 3,158, filed on August 2 | <u>4, 2012</u> ; |
| International Appl | cation No.: PCT/ | , filed on | ······································ |
| and | | | |
| ENTITLED: PROTECT | ING PAIRED VIRT | JAL MACHINES | |
| and identified by Attorne | y Docket Number: Bo | 060 | |
| and naming inventor(s) a | s follows: | | |
| INVENTOR(S): | Manoj Krishnan; Joann | ne Ren; Keith Farkas; Igor Tara | shansky; Elisha |

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.

Ziskind

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 | to 14 2015 . | by | Manoj Krishnan |
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| | Date | * | Manoj Krishnan |
| Executed on _ | | by _ | |
| | Date | | Joanne Ren |
| Executed on _ | | by _ | |
| | Date | | Keith Farkas |
| Executed on _ | · | by _ | |
| | Date | | Igor Tarashansky |
| Executed on | | by _ | |
| , | Date | - | Elisha Ziskind |

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| Executed on _ | Date 09/28/ 2015 | . by | Manoj Krishnan |
| | Date | | Joanne Ren |
| Executed on _ | ~~~~ | , by | |
| | Date | , , | Keith Farkas |
| Executed on _ | ~~~~ | , by _ | |
| | Date | | Igor Tarashansky |
| Executed on _ | | , by _ | |
| | Date | - | Elisha Ziskind |

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| | Date | | Manoj Krishnan |
| Executed on _ | | , by | |
| Executed on _ | Date 10/14/70/5 | , by | Joannic Ren Keith Farkas |
| | Date | | Keith Farkas |
| Executed on _ | | , by | |
| | Date | | Igor Tarashansky |
| Executed on | | , by | |
| • | Date | | Elisha Ziskind |

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| 22446 | Manoj Krishnan |
| Executed on | by |
| Date | Joanne Ren |
| Executed on | |
| Executed on 10 7 7 | 2015 by Inacology ky |
| Date | igor Tarasbansky |
| Executed on | , by |
| Date | Elisha Ziskind |

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|-------------|--------|---------------------|------|
| | Date | Manoj KRISHNAN | |
| Executed on | n i | (p.m.) | , by |
| 9°5 9 | Date | Joanne REN | |
| Executed on | Date | Keith FARKAS | , by |
| Executed on | | | , by |
| | Date | Igor TARASHANSKY | , 0, |
| Executed on | 4/7/14 | e. 11 | , by |
| | Date | Elisha ZISKIND Grah | |

Page 2 of 2