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| <b>PATENT ASSIGNMENT COVER SHEET</b> |
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4708321

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| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT             |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                 |
| <b>CONVEYING PARTY DATA</b>   |                            |
| <b>Name</b>   | <b>Execution Date</b>      |
| YOGESH GOVIND HANDE   | 11/28/2016                 |
| SHRAVAN SHANTHARAM  | 11/16/2016                 |
| KALYAN REGULA   | 11/20/2016                 |
| VARUN MURTHY  | 11/30/2016                 |
| BHUVANESH SHANMUGA SUNDARAM   | 11/17/2016                 |
| JONATHON DERISO   | 11/15/2016                 |
| <b>RECEIVING PARTY DATA</b>   |                            |
| <b>Name:</b>  | VMWARE, INC.               |
| <b>Street Address:</b>  | 3401 HILLVIEW AVENUE       |
| <b>City:</b>  | PALO ALTO                  |
| <b>State/Country:</b>   | CALIFORNIA                 |
| <b>Postal Code:</b>   | 94304                      |
| <b>PROPERTY NUMBERS Total: 1</b>  |                            |
| <b>Property Type</b>  | <b>Number</b>              |
| <b>Application Number:</b>  | 15365524                   |
| <b>CORRESPONDENCE DATA</b>  |                            |
| <b>Fax Number:</b>  | (650)427-4818              |
| <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> |                            |
| <b>Phone:</b>   | 4702474666                 |
| <b>Email:</b>   | ipadmin@vmware.com         |
| <b>Correspondent Name:</b>  | AIRWATCH LLC               |
| <b>Address Line 1:</b>  | 1155 PERIMETER CENTER WEST |
| <b>Address Line 2:</b>  | SUITE 100                  |
| <b>Address Line 4:</b>  | ATLANTA, GEORGIA 30338     |
| <b>ATTORNEY DOCKET NUMBER:</b>  | W386.01                    |
| <b>NAME OF SUBMITTER:</b>   | TINA SCHAFER               |
| <b>SIGNATURE:</b>   | /Tina Schafer/             |
| <b>DATE SIGNED:</b>   | 11/29/2017                 |

**Total Attachments: 12**

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## ASSIGNMENT

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

|                     |    |                   |
|---------------------|----|-------------------|
| Yogesh Govind Hande | of | Sandy Springs, GA |
|---------------------|----|-------------------|

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, CA 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: SINGLE SIGN-ON FRAMEWORK FOR BROWSER-BASED APPLICATIONS AND NATIVE APPLICATIONS**

and identified by Attorney Docket Number: W386.01

and naming inventor(s) as follows:

INVENTOR(S): Yogesh Govind Hande

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

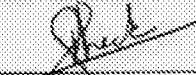
ASSIGNMENT

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 11/28/2016, by   
Date Yogesh Govind Hande

4851-2590-8796, v. 1

## ASSIGNMENT

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

|                    |    |             |
|--------------------|----|-------------|
| Shravan Shantharam | of | Cumming, GA |
|--------------------|----|-------------|

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, CA 94304 U.S.A. (VMware), its successors, assigns and legal representatives,

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- International Application No.: PCT/ \_\_\_\_\_, filed on \_\_\_\_\_;

and

**ENTITLED: SINGLE SIGN-ON FRAMEWORK FOR BROWSER-BASED APPLICATIONS AND NATIVE APPLICATIONS**

and identified by Attorney Docket Number: W386.01

and naming inventor(s) as follows:

INVENTOR(S): Shravan Shantharam

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





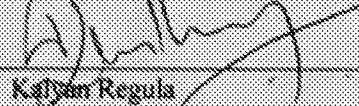
ASSIGNMENT

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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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 11/26/2006, by   
Date Kalyan Regula

4851-9314-8732, v. 1



## ASSIGNMENT

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

|              |    |             |
|--------------|----|-------------|
| Varun Murthy | of | Atlanta, GA |
|--------------|----|-------------|

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, CA 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:

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and

ENTITLED: **SINGLE SIGN-ON FRAMEWORK FOR BROWSER-BASED APPLICATIONS AND NATIVE APPLICATIONS**

and identified by Attorney Docket Number: W386.01

and naming inventor(s) as follows:

INVENTOR(S): Varun Murthy,

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.

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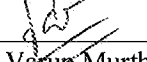
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Executed on 11/30/2016, by   
Date Varun Murthy

4825-0623-8268, v. 1

## ASSIGNMENT

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

Bhuvanesh Shanmuga Sundaram of Atlanta, Georgia

hereby sell, assign, transfer and set over to

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and

**ENTITLED: SINGLE SIGN-ON FRAMEWORK FOR BROWSER-BASED APPLICATIONS AND NATIVE APPLICATIONS**

and identified by Attorney Docket Number: W386.01

and naming inventor(s) as follows:

INVENTOR(S): Bhuvanesh Shanmuga Sundaram

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Executed on

Date

11/17/2016

by

Bhuvanesh Shanmuga Sundaram

4852-9099-3980, v. 1

## ASSIGNMENT

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

|                 |    |                  |
|-----------------|----|------------------|
| Jonathon Deriso | of | Suwanee, Georgia |
|-----------------|----|------------------|

hereby sell, assign, transfer and set over to

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and

**ENTITLED: SINGLE SIGN-ON FRAMEWORK FOR BROWSER-BASED APPLICATIONS AND NATIVE APPLICATIONS**

and identified by Attorney Docket Number: W386.01

and naming inventor(s) as follows:

INVENTOR(S): Jonathon Deriso

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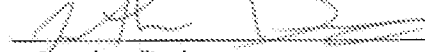
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Executed on 11/15/2016 by   
Date Jonathon Deriso

4832-2785-5164, v. 1