#### 11/12/2014 503057838

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3104440

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
JUNLAN ZHOU	01/25/2012
AMIN VAHDAT	01/25/2012
ARJUN SINGH	01/24/2012

#### **RECEIVING PARTY DATA**

Name:	GOOGLE INC.
Street Address:	1600 AMPHITHEATRE PARKWAY
City:	MOUNTAIN VIEW
State/Country:	CALIFORNIA
Postal Code:	94043

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14457392

#### CORRESPONDENCE DATA

Fax Number: (908)654-7866

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: (908) 518-6381

Email: Assignment@ldlkm.com

**Correspondent Name:** LDLK&M

Address Line 1: 600 SOUTH AVENUE WEST

Address Line 4: WESTFIELD, NEW JERSEY 07090

ATTORNEY DOCKET NUMBER:	GOOGLE 3.0-466 DIV (E)
NAME OF SUBMITTER:	NATALIE S. RICHER
SIGNATURE:	/Natalie S. Richer/
DATE SIGNED:	11/12/2014

### **Total Attachments: 3**

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**PATENT** REEL: 034153 FRAME: 0450 503057838

# ASSIGNMENT OF PATENT APPLICATION

Docket Number (Optional)

	GOOGLE 3.0-466	
WHEREAS, I, <u>Junian Zhou</u> of <u>1035 Aster Avenue</u> , <u>#2190</u> ; <u>Sunnyvale</u> , <u>California 94086</u> , have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "MULTI-STAGE SWITCHING TOPOLOGY" (hereafter "Patent Application"),		
WHEREAS (if the left box is checked), the Patent Application was filed with the U.S. Patent and rademark Office on, Application Number, and		
WHEREAS (if the left box is checked), the Patent Application names the following inventors: <u>Junian Zhou, Amin Vahdat, and Arjun Singh</u> (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. $13/358,835$ , filed on $1-26-12$ ] the application number and filing date of the application when known), and		
WHEREAS, <u>Google Inc.</u> , incorporated or otherwise formed in <u>Delaware</u> and having a place of business at <u>1600</u> <u>Amphitheatre Parkway; Mountain View, California 94043</u> (hereafter, the "assignee") is desirous of acquiring, or has acquired and is desirous of memorializing its acquisition further herein, the entire right, title and interest in same;		
NOW, THEREFORE, for good and valuable consideration the receipt of which is hereby acknowledged, I agree as follows. I agree to assign, and hereby do assign, to the assignee my entire right, title and interest in and to the Assigned Applications in the United States of America and all other countries, where "Assigned Applications" means the Patent Application, including any and all inventions, discoveries and other subject matter described therein, any divisional, continuation, continuation-in-part, substitute, reissue, re-examination or other application claiming priority or benefit to the Patent Application pursuant to any law or treaty, and any patent issuing from the foregoing. I agree to assign, and hereby do assign, to assignee the right to claim such priority or benefit. I have not previously conveyed, nor am I aware of an obligation to convey, my rights in the Assigned Applications to a third party. I hereby authorize the U.S. Patent and Trademark Office, and any other governmental agency in the world, to issue to assignee all patents resulting from the Assigned Applications and to record assignee's ownership thereof. At assignee's reasonable request I agree, without further remuneration, to execute and deliver documents prepared at assignee's expense and to provide other cooperation, such as testimony, as may be reasonably required to evidence or protect assignee's rights in the Assigned Applications. Assignee may assign or transfer all or part of its rights set forth herein in its sole discretion. I agree that the assignee may affix its signature to this document as well as any other indicia of its acceptance of the provisions hereof. If any provision herein is unenforceable, the requirements of the provision shall remain to the full extent permissible by law and the offending portions thereof shall be deemed replaced, to the extent possible, with a provision most closely reflecting the purpose of the offending provision.		
,	Me	
01/25/12	- July	
(Date)	(Signature)	
Signature of Witness	:	
<u>รื่องพ_กหนึ่</u> Printed Name of Witness		
,		

ASSIGNMENT	OF PATEN	IT APPLICATION
MADDICEMI	OI PAILIN	II AFFLICATION

Docket Number (Optional)

GOOGLE 3.0-466	
WHEREAS, I, Amin Vahdat of 481 Casita Way; Los Altos, California 94022, have invented or discovered oventions or discoveries, the subject matter of which is described in the patent application entitled "MULTI-STAGE SWITCHING TOPOLOGY" (hereafter "Patent Application"),	
WHEREAS (if the left box is checked), the Patent Application was filed with the U.S. Patent and rademark Office on, Application Number, and	
WHEREAS (if the left box is checked), the Patent Application names the following inventors: $\frac{\text{Unlan Zhou, Amin Vahdat, and Ariun Singh}}{\text{LP, to insert in here in brackets [Application No. } \frac{13/358,835}{\text{1.5}}, \text{ filed on } \frac{1-26-12}{\text{1.5}} \text{ the application number and filing date of the application when known), and}$	
WHEREAS, <u>Google Inc.</u> , incorporated or otherwise formed in <u>Delaware</u> and having a place of business at <u>1600</u> <u>Amphitheatre Parkway: Mountain View, California 94043</u> (hereafter, the "assignee") is desirous of acquiring, or has acquired and is desirous of memorializing its acquisition further herein, the entire right, title and interest in same;	
NOW, THEREFORE, for good and valuable consideration the receipt of which is hereby acknowledged, I agree as follows. I agree to assign, and hereby do assign, to the assignee my entire right, title and interest in and to the Assigned Applications in the United States of America and all other countries, where "Assigned Applications" means the Patent Application, including any and all inventions, discoveries and other subject matter described therein, any divisional, continuation, continuation-in-part, substitute, reissue, re-examination or other application claiming priority or benefit to the Patent Application pursuant to any law or treaty, and any patent issuing from the foregoing. I agree to assign, and hereby do assign, to assignee the right to claim such priority or benefit. I have not previously conveyed, nor am I aware of an obligation to convey, my rights in the Assigned Applications to a third party. I hereby authorize the U.S. Patent and Trademark Office, and any other governmental agency in the world, to issue to assignee all patents resulting from the Assigned Applications and to record assignee's ownership thereof. At assignee's reasonable request I agree, without further remuneration, to execute and deliver documents prepared at assignee's expense and to provide other cooperation, such as testimony, as may be reasonably required to evidence or protect assignee's rights in the Assigned Applications. Assignee may assign or transfer all or part of its rights set forth herein in its sole discretion. I agree that the assignee may affix its signature to this document as well as any other indicia of its acceptance of the provisions hereof. If any provision herein is unenforceable, the requirements of the provision shall remain to the full extent permissible by law and the offending portions thereof shall be deemed replaced, to the extent possible, with a provision most closely reflecting the purpose of the offending provision.	
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### ASSIGNMENT OF PATENT APPLICATION

Docket Number (Optional)

AGSIGNMENT OF FATERT AT LIGATION	GOOGLE 3.0-466	
WHEREAS, I, <u>Arjun Singh</u> of 651 <u>Franklin Street</u> , #4309; <u>Mountain View</u> , <u>California</u> 94041, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "MULTI-STAGE SWITCHING TOPOLOGY" (hereafter "Patent Application"),		
WHEREAS (if the left box is checked), the Patent Application was filed with the U.S. Patent and Trademark Office on, Application Number, and		
WHEREAS (if the left box is checked), the Patent Application names the following inventors: <u>Junian Zhou, Amin Vahdat, and Arjun Singh</u> (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. 13/358,835], filed on 1-26-12 the application number and filing date of the application when known), and		
WHEREAS, <u>Google Inc.</u> , incorporated or otherwise formed in <u>Delaware</u> and having a place of business at <u>1600</u> <u>Amphitheatre Parkway; Mountain View, California 94043</u> (hereafter, the "assignee") is desirous of acquiring, or has acquired and is desirous of memorializing its acquisition further herein, the entire right, title and interest in same;		
NOW, THEREFORE, for good and valuable consideration the receipt of which is hereby acknowledged, I agree as follows. I agree to assign, and hereby do assign, to the assignee my entire right, title and interest in and to the Assigned Applications in the United States of America and all other countries, where "Assigned Applications" means the Patent Application, including any and all inventions, discoveries and other subject matter described therein, any divisional, continuation, continuation-in-part, substitute, reissue, re-examination or other application claiming priority or benefit to the Patent Application pursuant to any law or treaty, and any patent issuing from the foregoing. I agree to assign, and hereby do assign, to assignee the right to claim such priority or benefit. I have not previously conveyed, nor am I aware of an obligation to convey, my rights in the Assigned Applications to a third party. I hereby authorize the U.S. Patent and Trademark Office, and any other governmental agency in the world, to issue to assignee all patents resulting from the Assigned Applications and to record assignee's ownership thereof. At assignee's reasonable request I agree, without further remuneration, to execute and deliver documents prepared at assignee's expense and to provide other cooperation, such as testimony, as may be reasonably required to evidence or protect assignee's rights in the Assigned Applications. Assignee may assign or transfer all or part of its rights set forth herein in its sole discretion. I agree that the assignee may affix its signature to this document as well as any other indicia of its acceptance of the provisions hereof. If any provision herein is unenforceable, the requirements of the provision shall remain to the full extent permissible by law and the offending portions thereof shall be deemed replaced, to the extent possible, with a provision most closely reflecting the		
purpose of the offending provision.	$\sim$ $\sim$ $\sim$ $\sim$	
24 Jan 2012 +	Trum XVI)	
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Signature of Witness		
Printed Name of Witness	•	
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PATENT REEL: 034153 FRAME: 0453

**RECORDED: 11/12/2014**