Form PFO-1595 (Res. 6)-(1) OMB No. 0651-0027 (exp. 03/31/2012)	U.S. DEPARTMENT OF COMMERC United States Patent and Trademark Offic				
RECORDATION FOR					
PATENTS ONLY					
To the Director of the U.S. Patent and Trademark Office, Please	record the attached documents or the new address(es) below				
Name of conveying party(les):	2. Name and address of receiving party(ies)				
Mohammed Waleed Kadous (07/01/2011), Andrew Lookingbill (07/06/2011), Sebastian Thrun (07/07/2011), and Additional name(s) of conveying party(les) attached? X Yes No	Name: Google Inc. Internal Address: Street Address.				
3. Nature of conveyance/Execution Date(s):					
Execution Date(s) in parentheses after inventor name X Assignment Merger Change of Name Security Agreement Joint Research Agreement	1600 Amphitheatre Parkway Mountain View, California 94043 City:				
Government Interest Assignment	State:				
Executive Order 9424. Confirmatory License Other	Country Zip Additional name(s) & address(es) Yes X No attached?				
A. Patent Application No (s) 13/179,147 Additional numbers attached?	B. Patent No.(s) Yes X No				
Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:				
Name: Noelle L. Cacciabeve LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP Internal Address. Atty. Dkt. GOOGLE 3.0-363	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00				
Street Address 600 South Avenue West	X Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)				
City Westfield	8. Payment Information				
State: NJ Zip: 07090					
Phone Number (908) 654-5000					
Fax Number: (908) 654-0415 Email Address:	Deposit Account Number 12-1095 Authorized User Name Noelle L. Cacciabeve				
9. Signaturo: Abdut Appualaces Signature	July 25, 2011 Date				
Noelle L. Cacciabeve - 63,075 Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:				

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RECORDATION FORM COVER SHEET (PTO-1595) (supplemental sheet)				
Additional Conveying Party(ies)/Execution Date(s) (1. Continued):				
Scott Ettinger (07/06/2011)				
Additional Assigr	nees (2. Continued)):	-	
Assignee Name: Internal Address. Street Address.		, e s, e consequença per en consequence en conseque		
City:	State -	Country:	Zip:	
City:	State:	Country:	Zip:	
Assignee Name: Internal Address Street Address	*** araqabanannaa** ; ;; araqa aaaaa		** Samil Verrander errande	
City:	State:	Country:	Zip:	
Additional Applications and/or Patents (4. Continued):				
Additional Patent Applicati 4A. Continued:	ion Numbers	Additional Patent Numbers 4B. Continued:		
777-77-78-3 <u>111</u> -111-1111-1111-1111-1111-1111-111	Additional number	ers attached? Yes No		

Docket No. GOOGLE 3 0-363

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	Docket Number (Optional)	
ASSIGNMENT OF PATENT APPLICATION	GOOGLE 3.0-363	
WHEREAS, I, Mohammed Waleed Kadous of 1000 Escalon California 94085, have invented or discovered inventions or discover the patent application entitled "CONSTRUCTING PATHS BASED ON Application"),	ies, the subject matter of which is described in A PARTICLE MODEL" (hereafter "Patent	
WHEREAS (if the left box is checked), the Patent Application Trademark Office on, Application Number		
X WHEREAS (if the left box is checked), the Patent Application Mohammod Waleod Kadous, Andrew Lookingbill, Sebastian Thrun, and authorize Lerner, David, Littenberg, Krumholz & Montlik, LLP, to insert 13/179, 147, filed on 7-8-11 I the application nuknown), and	d Scott Ettinger (and whereas I hereby In here in brackets (Application No.	
WHEREAS, Googlo Inc., incorporated or otherwise formed in 1600 Amphitheatre Parkway; Mountain View, California 94043 (herea or has acquired and is desirous of momorializing its acquisition further samo;	after, the "assignee") is desirous of acquiring.	
NOW, THEREFORE, for good and valuable consideration the agree as follows. I agree to assign, and hereby do assign, to the assigned Applications in the United States of America and all other means the Patent Application, including any and all inventions, discovered the patent Application pursuant to any last foregoing. I agree to assign, and hereby do assign, to assignee the repreviously conveyed, nor am I aware of an obligation to convey, my reparty. I hereby authorize the U.S. Patent and Trademark Office, and a sasignee's reasonable request I agree, without further remuneration at assignee's expense and to provide other cooperation, such as testifications of the protect assignee's rights in the Assigned Applications. As rights set forth herein in its sole discretion. I agree that the assignee mas any other indicia of its acceptance of the provisions hereof, if any prequirements of the provision shall remain to the full extent permissible shall be deemed replaced, to the extent possible, with a provision most offending provision.	gnee my entire right, title and interest in and to or countries, where "Assigned Applications" reries and other subject matter described eissue, re-examination or other application w or treaty, and any patent issuing from the ght to claim such priority or benefit. I have not ghts in the Assigned Applications to a third any other governmental agency in the world, to and to record assignee's ownership thereof, in to execute and deliver documents prepared mony, as may be reasonably required to signee may assign or transfor all or part of its may affix its signature to this document as well provision herein is unenforceable, the	
07/01/2011	today	
(Date)	(Signature)	
Signature of Witness Printed Name of Witness		

The second secon	A STATE OF THE STA			
ASSIGNMENT OF PATENT APPLICATION	Docket Number (Optional)			
ASSIGNMENT OF PAIGNI APPLICATION	GOOGLE 3.0-363			
WHEREAS, I, Andrew Lookingbill of 4159 El Camino Way: Apartment L; Palo Alto, California 94306, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "CONSTRUCTING PATHS BASED ON A PARTICLE MODEL" (hereafter "Patent Application"),				
WHEREAS (if the left box is checked), the Patent Application Trademark Office on, Application Number	was filed with the U.S. Patent and			
WHEREAS (if the left box is checked), the Patent Application names the following inventors: Mohammed Walcod Kadous, Andrew Lookingbill, Sebastian Thrun, and Scott Ettinger (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. 13/179,147], filed on 7-8-11] 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 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 agree as follows. I agree to assign, and hereby do assign, to the assig the Assigned Applications in the United States of America and all other means the Patent Application, including any and all inventions, discover therein, any divisional, continuation, continuation-in-part, substitute, religiously conveyed, not am I aware of an obligation pursuant to any law foregoing. I agree to assign, and hereby do assign, to assignee the rig previously conveyed, nor am I aware of an obligation to convey, my rig party. I hereby authorize the U.S. Patent and Trademark Office, and at issue to assignee all patents resulting from the Assigned Applications at assignee's reasonable request I agree, without further remuneration at assignee's expense and to provide other cooperation, such as testime vidence or protect assignee's rights in the Assigned Applications. Assights set forth herein in its sole discretion. I agree that the assignee mass any other indicia of its acceptance of the provisions hereof. If any proper requirements of the provision shall remain to the full extent permissible shall be deemed replaced, to the extent possible, with a provision most offending provision. O7/06/20/I Printed Name of Witness O7/06/20/I Printed Name of Witness	gnee my entire right, title and interest in and to in countries, where "Assigned Applications" eries and other subject matter described lissue, re-examination or other application who or treaty, and any patent issuing from the ght to claim such priority or benefit. I have not ghts in the Assigned Applications to a third any other governmental agency in the world, to and to record assignee's ownership thereof, and to record assignee's ownership thereof, and to execute and deliver documents prepared mony, as may be reasonably required to signee may assign or transfer all or part of its any affix its signature to this document as well rovision herein is unenforceable, the			

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A STATE OF THE PARTY OF THE PAR		
ASSIGNMENT OF PATENT APPLICATION	Docket Number (Optional)	
	GOOGLE 3.0-363	
WHEREAS, I, <u>Sebastian Thrun</u> of <u>13818 Page Mill Road; Lo</u> or discovered inventions or discoveries, the subject matter of which is "CONSTRUCTING PATHS BASED ON A PARTICLE MODEL" (herea	described in the patent application entitled	
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: Mohammed Waleed Kadous, Andrew Lookingbill, Sebastian Thrun, and Scott Ettinger (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. $\frac{13/179,147}{13/179,147}$, filed on $\frac{7-8-11}{13/179,147}$] 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 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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Signature of Witness

(Date)

Printed Name of Witness

(Signature)

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ASSIGNMENT OF PATENT APPLICATION Docket Number (Optional)

GOOGLE 3.0-363 WHEREAS, I, Scott Ettinger of 56 Hilltop Drive; San Carlos, California 94070, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "CONSTRUCTING PATHS BASED ON A PARTICLE MODEL" (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: Mohammed Waleed Kadous, Andrew Lookingbill, Sebastian Thrun, and Scott Ettinger (and whereas thereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. 13/179,147 ___, filed on 7-8-11 ___] the application number and filing date of the application when known), and WHEREAS, Google Inc., incorporated or otherwise formed in Delaware and having a place of business at 1600 Amphitheatre Parkway; Mountain View, California 94043 (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 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, release, 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 proviously 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 protoct 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. (Date) (Signature) Signature of Witness Printed Name of Witness

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