

Form PTO-1595 (Rev. 03-11)
OMB No. 0651-0027 (exp. 03/31/2012)

U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office. Please record the attached documents or the new address(es) below

| | |
|---|--|
| <p>1. Name of conveying 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(ies) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> | <p>2. Name and address of receiving party(ies) Name: <u>Google Inc.</u> Internal Address: _____ Street Address: _____ 1600 Amphitheatre Parkway Mountain View, California 94043 City: _____ State: _____ Country: _____ Zip: _____ Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> |
| <p>3. Nature of conveyance/Execution Date(s): Execution Date(s) in parentheses after inventor name <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____</p> | <p>4. Application or patent number(s): <input type="checkbox"/> This document is being filed together with a new application. A. Patent Application No (s) <u>13/179,147</u> B. Patent No.(s) Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> |
| <p>5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Noelle L. Cacciabeve</u> <u>LERNER, DAVID, LITTENBERG,</u> <u>KRUMHOLZ & MENTLIK, LLP</u> Internal Address, Atty. Dkt. <u>GOOGLE 3.0-363</u> Street Address <u>600 South Avenue West</u> City: <u>Westfield</u> State: <u>NJ</u> Zip: <u>07090</u> Phone Number: <u>(908) 654-5000</u> Fax Number: <u>(908) 654-0415</u> Email Address: _____</p> | <p>6. Total number of applications and patents involved: 1</p> <p>7. Total fee (37 CFR 1.21(h) & 3.41) \$ <u>40.00</u> <input checked="" type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title)</p> |
| <p>8. Payment Information Deposit Account Number <u>12-1095</u> Authorized User Name <u>Noelle L. Cacciabeve</u></p> | |
| <p>9. Signature: <u><i>Noelle L. Cacciabeve</i></u> July 25, 2011 Signature Date <u>Noelle L. Cacciabeve - 63.075</u> Name of Person Signing Total number of pages including cover sheet, attachments, and documents: 6</p> | |

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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 Assignees (2. Continued):

Assignee Name: _____

Internal Address:

Street Address:

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address:

Street Address:

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address:

Street Address:

City: _____ State: _____ Country: _____ Zip: _____

Additional Applications and/or Patents (4. Continued):

Additional Patent Application Numbers
4A. Continued:

Additional Patent Numbers
4B. Continued:

Additional numbers attached? Yes No

ASSIGNMENT OF PATENT APPLICATION

Docket Number (Optional)

GOOGLE 3.0-363

WHEREAS, I, Mohammed Waleed Kadous of 1000 Escalon Avenue, Apartment E2034, Sunnyvale, California 94085, 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

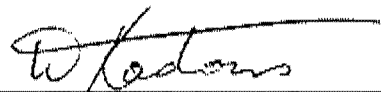
WHEREAS (if the left box is checked), the Patent Application names the following inventors: Mohammed Waleed Kadous, Andrew Lookingbill, Sebastian Thrun, and Scott Ettinger (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Montlik, LLP, to insert in here in brackets [Application No. 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 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.

07/01/2011

(Date)



(Signature)



Signature of Witness

Rus Heywood

Printed Name of Witness

ASSIGNMENT OF PATENT APPLICATION

Docket Number (Optional)

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"),

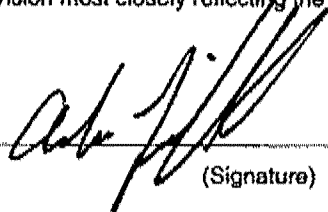
WHEREAS (if the left box is checked), the Patent Application was filed with the U.S. Patent and Trademark Office on _____, Application Number _____, and

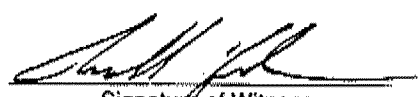
WHEREAS (if the left box is checked), the Patent Application names the following inventors: Mohammed Walood Kadous, Andrew Lookingbill, Sebastian Thrun, and Scott Ettinger (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. 13/179,147, filed on 7-8-11] the application number and filing date of the application when known), and

WHEREAS, 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 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.

07/06/2011
(Date)


(Signature)


Signature of Witness

07/06/2011
Printed Name of Witness

ASSIGNMENT OF PATENT APPLICATION

Docket Number (Optional)

GOOGLE 3.0-363

WHEREAS, I, Sebastian Thrun of 13818 Page Mill Road, Los Altos Hills, California 94022, 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 I hereby authorize Lerner, David, Littenberg, Krumholz & Montlik, 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 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.

7/7/11
(Date)


(Signature)


Signature of Witness

SERGIO CANDARA
Printed Name of Witness

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

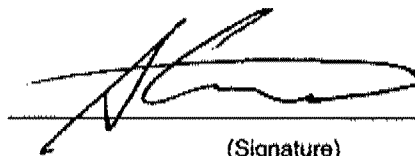
WHEREAS (if the left box is checked), the Patent Application names the following inventors: Mohammed Waleed Kadous, Andrew Lookingbill, Sebastian Thrun, and Scott Ettinger (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. 13/179,147, filed on 7-8-11] the application number and filing date of the application when known), and

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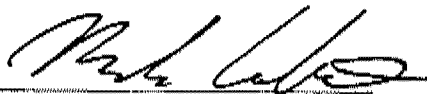
NOW, THEREFORE, for good and valuable consideration the receipt of which is hereby acknowledged, I agree as follows. I agree to assign, and hereby do assign, to the assignee my entire right, title and interest in and to the Assigned Applications in the United States of America and all other countries, 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.

7/6/11

(Date)



(Signature)



Signature of Witness

Mark Colbert

Printed Name of Witness