


Form PTO-1595 (Rev. 03-11)
OMB No. 0651-0027 (exp. 03/31/2015)

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.	
1. Name of conveying party(ies): Nathaniel Fairfield (06/15/2010), Christopher Paul Urmson (06/15/2010), and Sebastian Thrun (06/16/2010) Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies) Name: <u>Google Inc.</u> Internal Address: _____ Street Address: <u>1600 Amphitheatre Parkway</u> City: <u>Mountain View</u> State: <u>California</u> Country: <u>United States of America</u> Zip: <u>94043</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Nature of conveyance/Execution Date(s): Execution Date(s): <u>In parentheses after inventor name</u> <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 8424, Confirmatory License <input type="checkbox"/> Other _____	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>14/030,397</u> B. Patent No.(s) _____ Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Noelle L. Cacciabeve</u> <u>LERNER, DAVID, LITTEMBERG,</u> <u>KRUMHOLZ & MENTLIK, LLP</u> Internal Address: <u>Atty. Dkt.: GOOGLE 3.0-151 CON</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>908-654-7866</u> Email Address: <u>mcormier@ldlkm.com</u>	6. Total number of applications and patents involved: 1 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)
8. Payment Information Deposit Account Number <u>12-1095</u> Authorized User Name <u>Noelle L. Cacciabeve</u>	
9. Signature: <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">  _____ Noelle L. Cacciabeve - 63,075 Name of Person Signing </div> <div style="text-align: right;"> <u>September 20, 2013</u> Date Total number of pages including cover sheet, attachments, and documents: 4 </div> </div>	

CH \$40.00 121095 14030397

ASSIGNMENT OF PATENT APPLICATION

Docket Number (Optional)

GOOGLE 3.0-151

WHEREAS, I, Nathaniel Fairfield of 1 58 Burgoyne Street Mountain View, California 94043, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "TRAFFIC SIGNAL MAPPING AND DETECTION" (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: Nathaniel Fairfield, Christopher Urmson, and Sebastian Thrun (and I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. 12/819,575, filed on June 21, 2010] 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.

June 15, 2010
(Date)

[Signature]
(Signature)

[Signature]
Signature of Witness
Jiajun Zhu
Printed Name of Witness

ASSIGNMENT OF PATENT APPLICATION

Docket Number (Optional)

GOOGLE 3.0-151

WHEREAS, I, Christopher Umson of 218 Central Avenue, Mountain View, California 94043, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "TRAFFIC SIGNAL MAPPING AND DETECTION" (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

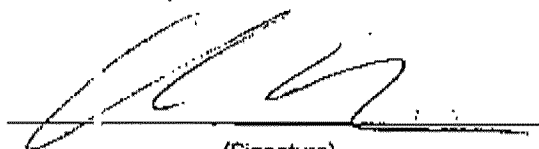
☒ WHEREAS (if the left box is checked, the Patent Application names the following inventors: Nathaniel Fairfield, Christopher Umson, and Sebastian Thrun (and whereas I hereby authorize Leiner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. 12/819,575, filed on June 21, 2010] 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;

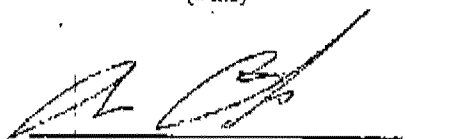
NOW, THEREFORE, for good and valuable consideration the receipt of which is hereby acknowledged, I agree as follows. I agree to assign, and hereby do assign, to the assignee my entire right, title and interest in and to the Assigned Applications in the United States of America and all other countries,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

June 15, 2010

(Date)



(Signature)



Signature of Witness

Andrew Chatham

Printed Name of Witness

ASSIGNMENT OF PATENT APPLICATION

Docket Number (Optional)

GOOGLE 3.0-151

WHEREAS, I, Sebastian Thrun of 843 Pine Hill Rd., Palo Alto, California 94305, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "TRAFFIC SIGNAL MAPPING AND DETECTION" (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

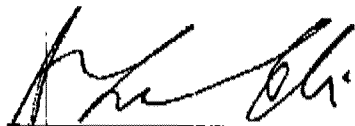
☒ WHEREAS (if the left box is checked), the Patent Application names the following inventors: Nathaniel Fairfield, Christopher Umson, and Sebastian Thrun (and whereas I hereby authorize Lerner, David, Litteberg, Krumholz & Mendik, LLP, to insert in here in brackets [Application No. 12/819,575 filed on June 21, 2010] 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.

6-16-10

(Date)


(Signature)

Signature of Witness

Anthony W. Anderson

Printed Name of Witness