Form PTO-1595 (Rev. 03-11) DMB No. 0651-0027 (exp. 03/31/2015)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office
RECORDATION FOR	
PATENTS	S 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(les)
Peter Craig Lombrozo (06/29/2012), Carsten Jensen (06/29/2012), Andrew Barton-Sweeney (06/29/2012), Additional namo(s) of conveying party(les) attached?	Name: Google Inc. Internal Address: Street Address:
3. Nature of conveyance/Execution Date(s):	1
Execution Date(s): in perentheses after inventor name X Assignment Merger Change of Name Security Agreement Joint Research Agreement	1600 Amphitheatre Parkway City: Mountain View
Government Interest Assignment	State: California
Executive Order 9424, Confirmatory License Other	Country: United States of America Zlp: 94043 Additional name(s) & address(es) Yes X No attached?
A. Patent Application No.(s) 13/539,030 Additional numbers attached	? Yes X No
Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: Kiril Dimov LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Internal Address: Atty. Dkl.: GOOGLE 3.0-745 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 Zlp: 07090	
Phone Number: 908-654-5000	
Fax Number: 908-654-7866	Deposit Account Number 12-1095
Email Address: ataylor@ldikm.com	Authorized User Name Kiril Dimov
9. Signature:	July 5, 2012 Date
Kiril Dimov - 60,490 Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:

PATENT REEL: 028553 FRAME: 0623

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RECORDATION FORM COVER SHEET (PTO-1595) (supplemental sheet)			
Additional Conveyir	ng Party(ies)/Exec	cution Date(s) (1. Continued):	
Russell Smith (06/29/20	012), and Daniel Lyn	n L arne r (06/29/2012)	
Additional Assignee	es (2. Continued):		
Internal Address: Street Address:			
Cily:	State:	Country:	Zip:
Assignee Name:			
internal Address:			
Street Address:			
City:	State:	Country:	Zip:
Assignee Name:			***************************************
Internal Address:			
Street Address:			
City:	State:	Country:	Zip:
Additional Applicat	ions and/or Pater	nts (4. Continued):	
Additional Patent Applicatio		Additional Patent Numbers 4B. Continued:	
	Additional numb	ers attached? Yes No	

Docket No.:

,		
-	Docket Number (Optional)	
ASSIGNMENT OF PATENT APPLICATION	GOOGLE 3.0-745	
WHEREAS, I, <u>Peter Craio Lombrozo</u> of <u>244 Ross Street: Santa</u> discovered inventions or discoveries, the subject matter of which is described APPARATUS FOR DETERMINING VEHICLE LOCATION BASED (Application*),	bed in the patent application entitled "METHUD	
WHEREAS (If the left box is checked), the Patent Application w Trademark Office on, Application Number	es filed with the U.S. Patent end	
WHEREAS (If the left box is checked), the Petent Application of Peter Creig Lombrozo, Carsten Jensen, Andrew Barton-Sweeney, Russell hereby authorize Lerner, David, Littenberg, Krumholz & Mentilik, LLP, to instance 13/539,030, filed on 6-29-12, the application number and	Smith and Daniel I was Larner (and Whereas I	
WHEREAS, <u>Google Inc.</u> , incorporated or otherwise formed in <u>D</u> <u>Amphitheatre Parkway: Mountain View. California 94043</u> (hereafter, the bacquired and is desirous of memorializing its acquisition further herain, the	"assignee") is desirous of acquiring, or has	
NOW, THEREFORE, for good and valuable consideration the mass follows. I agree to assign, and hereby do assign, to the assignee my considerations in the United States of America and all other countries and Applications in the United States of America and all other countries and Application, including any and all inventions, discoveries and other continuation, continuation-in-part, substitute, release, re-examination or operated Application pursuant to any lew or treaty, and any patent issuing if do assign, to assignee the right to claim such priority or benefit. I have no obligation to convey, my rights in the Assigned Applications to a third partrademark Office, and any other governmental agency in the world, to is: Assigned Applications and to record assignee's ownership thereof. At as further remuneration, to execute and deliver documents prepared at assignee as testimony, as may be reasonably required to evidence or protect Assignee may assign or transfer all or part of its rights set forth hersin in affix its signature to this document as well as any other indicia of its accelerable in the amening portions thereof shell be deemed replaced, to the extent possib purpose of the offending provision.	entire right, title and interest in and to the vies, where "Assigned Applications" means the r subject metter described therein, any divisional, ther application claiming priority or benefit to the rom the foregoing. I agree to assign, and hereby of previously conveyed, nor am I aware of an ly. I hereby euthorize the U.S. Patent and sue to assignee all patents resulting from the algnee's reasonable request I agree, without gnee's expense and to provide other cooperation, assignee's rights in the Assigned Applications. Its sole discretion, I agree that the assignee may ptance of the provisions hereof, if any provision ithe full extent permissible by law and the	
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5/29/2012 de		
(Date)	(Signature)	
Signature of Witness Ryn Andrade Printed Name of Witness		

Docket Number (Optional)

ASSIGNMENT OF PATENT APPLICATION	GOOGLE 3.0-745	
WHEREAS, I, Careten Jensen of 649A Capo St.: San Francisco, California 94110, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "METHOD AND APPARATUS FOR DETERMINING VEHICLE LOCATION BASED ON MOTOR FEEDBACK" (hereafter "Patent Application").		
WHEREAS (if the left box is checked), the Petent 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: Peter Craig Lombrozo, Ceraten Jensen, Andrew Barton-Sweeney, Russell Smith, and Daniel Lynn Lamer (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentilk, LLP, to insert in here in brackets (Application No. 13/539.030, filed on 6-29-12 the application number and filing date of the application when known), and		
WHEREAS, <u>Google Inc.</u> , incorporated or otherwise formed in <u>Ociaware</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, 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 assignes the right to claim such priority or benefit. I have not previously conveyed, nor am I sware 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. Assignee's resconable request I agree, without further remuneration, to execute and deliver documents prepared at assignee's resconable request I agree, without 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 indicis 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.		
offending portions thereof shall be deemed replaced, to the extent possible	e, with a provision most closely reflecting the	
offending portions thereof shall be deemed replaced, to the extent possible purpose of the offending provision.	e, with a provision most closely reflecting the	
offending portions thereof shall be deemed replaced, to the extent possible	e, with a provision most closely reflecting the	

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PATENT

REEL: 028553 FRAME: 0626

	Docket Number (Optional)
ASSIGNMENT OF PATENT APPLICATION	GOOGLE 3.0-745
WHEREAS, I, <u>Andrew Barton-Swaeney</u> of <u>1608 Harmon St.: Andrew Barton-Swaeney</u> of <u>1608 Harmon St.: And discovered inventions or discoveries, the subject matter of which is described APPARATUS FOR DETERMINING VEHICLE LOCATION BASED (Application"),</u>	man in the delent eddication chalco inicitive
WHEREAS (if the left box is checked), the Patent Application w Trademark Office on, Application Number	as filed with the U.S. Patent and , and
WHEREAS (If the left box is checked), the Patent Application of Peter Craig Lombrozo, Carsten Jensen, Andrew Barton-Sweenev, Russell hereby authorize Lerner, David, Littenberg, Krumholz & Mentilik, LLP, to in: $\frac{13/539,030}{1}$, filed on $\frac{6-29-12}{1}$ the application number and	Smith, and Daniel Lynn Larner (and whereas i sert in here in brackets [Application No. er and filing date of the application when known),
WHEREAS, <u>Google Inc.</u> , Incorporated or otherwise formed in <u>P</u> <u>Amphilheetre Parkway: Mountain View. California 94043</u> (hereafter, the acquired and is desirous of memorializing its acquisition further herein, to	"assignee") is desirous of acquiring, or nes
NOW, THEREFORE, for good and valuable consideration the ras follows. I agree to assign, and hereby do assign, to the assignee my a Assigned Applications in the United States of America and all other coun Patent Application, including any and all inventions, discoveries and other continuation, continuation-in-part, substitute, release, re-examination or continuation, continuation-in-part, substitute, release, re-examination or continuation, pursuant to any law or treaty, and any patent issuing if do assign, to assignee the right to claim such priority or benefit. I have no obligation to convey, my rights in the Assigned Applications to a third part Trademark Office, and any other governmental agency in the world, to its Assigned Applications and to record assignee's ownership thereof. At as further remuneration, to execute and deliver documents prepared at assigned as testimony, as may be reasonably required to evidence or protect Assignee may assign or transfer all or part of its rights set forth herein in affix its signature to this document as well as any other indical of its accelerable is unenforceable, the requirements of the provision shall remain to offending portions thereof shall be deemed replaced, to the extent possition purpose of the offending provision.	entire right, tille and interest in and to the tries, where "Assigned Applications" means the irreubject matter described therein, any divisional, other application claiming priority or benefit to the from the foregoing. I agree to assign, and hereby ot praviously conveyed, nor am I aware of an ity. I hereby authorize the U.S. Palent and sue to assignee all patents resulting from the assignee's reasonable request I agree, without gnee's expense and to provide other cooperation, transignee's rights in the Assigned Applications, it assignee's the provisions hereof. If any provision of the full extent permissible by law and the
6/29/2012 O	(Signature)
Ryan Andrade Printed Name of Witness	
	,

	Docket Number (Optional)	
ASSIGNMENT OF PATENT APPLICATION	GOOGLE 3.0-745	
WHEREAS, 1, <u>Russell Smith</u> of <u>3157 Alien Way: Santa Clara, California 96051</u> , have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "METHOD AND APPARATUS FOR DETERMINING VEHICLE LOCATION BASED ON MOTOR FEEDBACK" (hereafter "Patent Application"),		
WHEREAS (if the left box is checked), the Patent Application was Trademark Office on, Application Number	ras filed with the U.S. Patent and , and	
WHEREAS (If the left box is checked), the Patent Application in Peter Creig Lombrozo, Carsten Jensen, Andrew Barton-Sweeney, Russell hereby authorize Lerner, Devid, Littenberg, Krumholz & Mentilk, LLP, to in 13/539.030, filed on 6-29-12 the application numbers	smith, and Daniel Lynn Letter (and whereas i sert in here in brackete (Application No. er and filing date of the application when known),	
WHEREAS, <u>Google Inc.</u> , incorporated or otherwise formed in <u>E</u> <u>Amphitheatre Parkway: Mountain View, California 94043</u> (hereafter, the acquired and is desirous of memorializing its acquisition further herein, to	-assignee") is desirous of scolumity, or has ne entire right, little and interest in same;	
NOW, THEREFORE, for good and valuable consideration the ras follows. I agree to assign, and hereby do assign, to the assignee my Assigned Applications in the United States of America and all other countral Patent Application, including any and all inventions, discoveries and other continuation, continuation-in-part, substitute, reissue, re-exemination or of Patent Application pursuant to any law or treaty, and any patent issuing the assign, to assignee the right to claim such priority or benefit. I have no obligation to convey, my rights in the Assigned Applications to a thirty part Trademark Office, and any other governmental agency in the world, to is Assigned Applications and to record assignee's ownership thereof. At assigned Applications and to record assignee's ownership thereof. At assignee may assign or transfer all or part of its rights set forth herein in affix its signature to this document as well as any other indica of its acceptations in unenforceable, the requirements of the provision shall remain to offending portions thereof shall be deemed replaced, to the extent possispurpose of the offending provision.	entire right, the end interest in all to the attries, where "Assigned Applications" means the er subject metter described therein, any divisional, other application claiming priority or benefit to the from the foregoing. I agree to assign, and hereby not previously conveyed, nor am I aware of an arty. I hereby authorize the U.S. Patent and usua to assignee all patents resulting from the assignee's reasonable request I agree, without ignee's expense and to provide other cooperation, at assignee's rights in the Assigned Applications. Its sole discretion. I agree that the assignee may be plance of the provisions hereof, if any provision of the full extent permissible by law and the	
6/29/2012.	R. Sulle	
(Date)	(Signature)	
Ryan Andrada Printed Name of Wilness		
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Docket Number (Optional) ASSIGNMENT OF PATENT APPLICATION **GOOGLE 3.0-745** WHEREAS, I, Daniel Lynn Larner of 1495 Oak Canyon Dr.; San Jose, Callfornia 95120, have Invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "METHOD AND APPARATUS FOR DETERMINING VEHICLE LOCATION BASED ON MOTOR FEEDBACK" (hereafter "Patent Application"), WHEREAS (If the left box is checked), the Petent Application was filed with the U.S. Patent and _____ Application Number _____ WHEREAS (If the left box is checked), the Patent Application names the following inventors: Peter Craig Lombrozo, Carsten Jensen, Andrew Barton-Sweeney, Russell Smith, and Deniel Lynn Larner (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. 13/539,030], filed on 6-29-12 ___] the application number and filling date of the application when known), WHEREAS, Google Inc., Incorporated or otherwise formed in Delaware and having a place of business at 1600 Amphitheetre Parkway: Mountain View. Cellifornia 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 easign, and hereby do assign, to the assignee my entire right, title and interest in and to the Assigned Applications in the United Stales 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, releave, 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 Patent Application pursuant to any law or treaty, and any patent issuing from the foregoing. I agree to sestin, the help of assign, to essignee 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 shot 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 trensfer all or part of its rights set forth herein in its sole discretion.) agree that the assignee may affix its signature to this document se well as any other indicis 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. Printed Name of Witness

PATENT

REEL: 028553 FRAME: 0629