OMB No. 0651-0027 (exp		United States Patent and Trademark OF		
PATENTS ONLY				
To the Director of th	e U.S. Palent and Trademark Office: Pleas	se record the attached documents or the new address(es) below.		
1. Name of conve		2. Name and address of receiving party(les)		
Jiajun Zhu (09/26/2012), Dmitri A. Dolgov (09/26/2012), and Christopher Paul Urmson				
		Name: Google Inc.		
(09/26/2012)		Internal Address:		
	nveying party(ies) attached? Yes X No	Street Address:		
3. Nature of convey	vance/Execution Date(s):			
Execution Date(s): In parentheses after inventor name		1600 Amphitheatre Parkway		
x Assignment	Merger Change of Name			
Security Agreen	nent Joint Research Agreement	City: Mountain View		
Government Inte	areat Assignment	State: California		
Executive Order	9424, Confirmatory License			
Other				
		- attached?		
4. Application or p	atent number(s):	This document is being filed together with a new application.		
A. Patent Applicatio	n No.(6)	B. Pateni No.(s)		
13/628.9	986			
	Additional numbers attached			
Name and address concerning docum	to whom correspondence ent should be mailed:	5. Total number of applications and patents involved:		
Name:	Joshua E. Garfield			
	RNER, DAVID, LITTENBERG, RUMHOLZ & MENTLIK, LLP			
		7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00		
Internal Address: Atty, Dkt.: GOOGLE 3.0-774 Street Address: 600 South Avenue West				
		Authorized to be charged to deposit account		
		Enclosed		
		None required (government interest not affecting title		
Dity:	Westfield	9. Payment Information		
	NJ Zip: 07090			
hone Number:	908-654-5000			
ax Number:	908-654-7866	Deposit Account Number 12-1095		
mail Address:	ataylor@ldlkm.com	Authorized User Name Joshua E. Garfield		
Signature:	α			
Aon	- E alinto	October 17, 2012		
	Signature	Dale		
	Joshua E. Garfield - 58,416	Total number of pages including cover 4		
	Name of Person Signing	sheet, atlachments, and documents:		

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	Docket Number (Optional)
ASSIGNMENT OF PATENT APPLICATION	GOOGLE 3.0-774
WHEREAS, I. <u>Jiajun Zhu</u> of <u>421 Paria Terrace: Sunnvvale. Call</u> Inventions or discoveries, the subject matter of which is described in the SENSORS OF AN AUTONOMOUS VEHICLE" (hereafter "Patent Applica	Datent application entitled "CROSS-VALIDATING
WHEREAS (if the left box is checked), the Pateni Application w Trademark Office on, Application Number	as filed with the U.S. Patent and
WHEREAS (if the left box is checked), the Patent Application is Jialuh Zhu. Dmitri A. Dolgov, and Christopher Paul Urmson (and whereas i Krumholz & Menilik, LLP, to insert in here in brackets [Application No the application when known), and	hereby authorize Lerner, David, Littenberg, 3/628, 986, filed on 9-27-12
WHEREAS, <u>Google Inc.</u> , incorporated or otherwise formed in <u>D</u> <u>Amphilmeatre Parkway: Mountain View. California, 94043</u> (herealter, the ' acquired and is desirous of memorializing its acquisition further herein, th	'assignee") is desirous of acquiring, or has
NOW, THEREFORE, for good and valuable consideration like re as follows. I agree to assign, and hereby do assign, to the assignee my e Assigned Applications in the United States of America and all other count Patent Application, including any and all Inventions, discoveries and other continuation, continuation-in-part, substitute, release, re-examination or or Patent Application pursuant to any law or treaty, and any patent leaving fr 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 iss Assigneed Applications and to record assignee's ownership thereof. At asi further remuneration, to execute and deliver documents prepared at assig such as testimony, as mey be reasonably required to evidence or protect Assignee may assign or transfer all or part of its rights set forth herein in I affix its signature to this document as well as any other Indicia of Its accept herein is unenforceable, the requirements of the provision shall remain to offending portions thereof shall be deemed replaced, to the extent possibl purpose of the offending provision.	Intire right, title and Interest In and to the rice, where "Assigned Applications" means the subject matter deacribed therein, any divisional, ther application claiming priority or benefit to the om the foregoing. I agree to assign, and hereby of previously conveyed, nor am I aware of an y. I hereby authorize the U.S. Patent and use to assignee all patents resulting from the signee's reasonable request I agree, without inee's expense and to provide other cooperation, assignee's rights in the Assigned Applications. Is sole discretion. I agree that the assignee may otance of the provisions hereof. If any provision the full extent permissible by law and the
<i>A i i i i i i i i i i</i>	
(Date)	James
(Date) (pita)	(Signature)
077	
Signature of Witness	
- John Tis Antu Printed Name of Witness	
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PATENT REEL: 029158 FRAME: 0426

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	Docket Number (Optional)
ASSIGNMENT OF PATENT APPLICATIO	
	GOOGLE 3.0-774
WHEREAS, I, <u>Dmiliri A. Dolgov</u> of <u>801 Church Street: A</u> Invented or discovered inventions or discoveries, the subject mati "CROSS-VALIDATING SENSORS OF AN AUTONOMOUS VEHI	partment 1323: Mountein View, California 94041, have ter of which is described in the patent application entitled ICLE" (hereafter "Patent Application"),
Trademark Office on, Application Number	cation was lifed with the U.S. Patent and
X WHEREAS (If the left box is checked), the Patent Applic Jialun Zhu, Dmitri A. Dolgov, and Christopher Paul Urmson (and w Krumholz & Mentlik, LLP, to Insort in here in brackets [Application I the application number and filing date of the application when know	hereas I hereby authorize Lerner, David, Littenberg, No. 13/628, 986 (illed on 9-27-12 1
WHEREAS, <u>Gooole Inc.</u> , incorporated or otherwise form <u>Amphilheatre Parkway: Mountain View, California, 94043</u> (hereaf acquired and is destrous of memorializing its acquisition further he	ted in <u>Delaware</u> and having a place of business at <u>1600</u> ter, the "assignee") is desirous of acquiring, or has erain, the entire right, title and interest in same;
NOW, THEREFORE, for good and valuable consideration as follows. I agree to assign, and hereby do assign, to the assign Assigned Applications in the United States of America and all other Patent Application, Including any and all Inventions, discoveries and continuation, continuation-in-part, substitute, releasue, re-examinant Patent Application pursuant to any faw or treaty, and any patent is do assign. to assignee the right to claim such priority or benefit. I obligation to convey, my rights in the Assigned Applications to a li Trademark Office, and any other governmentai agency in the word Assigned Applications and to record assignee's ownership thereol further remuneration, to execute and deliver documents prepared such as testimony, as may be reasonably required to evidence or Assignee may assign or transfer all or part of its rights set forth he affir its signature to this document as well as any other indicia of it herein is unenforceable, the requirements of the provision abail re- olfending portions thereof shall be deemed replaced, to the extent purpose of the offending provision.	the my entire right, little and interest in and to the er countries, where "Assigned Applications" means the nd other subject matter described therein, any divisional, ion or other application claiming priority or benefit to the suling from the foregoing. I agree to assign, and hereby have not previously conveyed, nor am I aware of an olind party. I hereby authorize the U.S. Patent and id, to issue to assignee all patents resulting from the . Al assignee's reasonable request I agree, without at assignee's expense and to provide other cooperation, protect assignee's rights in the Assigned Applications. rein in its sole discretion. I agree that the assignee may ts acceptance of the provisions hereof. If any provision main to the full extent compission the
9/26/2012	100an
	(Signature)
Signature of Witness	
Printed Name of Wilness	

PATENT REEL: 029158 FRAME: 0427 1

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ASSIGNMENT OF PATENT APPLICATION	Docket Number (Optional)
	GOOGLE 3.0-774
WHEREAS, I, <u>Christopher Paul Urmson</u> of <u>1777 Letham St.: M</u> discovered Inventions or discoveries, the subject matter of which is desci VALIDATING SENSORS OF AN AUTONOMOUS VEHICLE* (hereafter *	ribed In the patent application entitled "CROSS-
WHEREAS (if the left box is checked), the Patent Application w Trademark Office on, Application Number	vas filed with the U.S. Patent and
WHEREAS (if the left box is checked), the Patent Application n Jialun Zhu. Dmitri A. Dolaov. and Christopher Paul Urmeon (and whereas Krumhoiz & Mentlik, LLP, to insert in here in brackets (Application No. <u>13</u> the application number and filing date of the application when known), and	I hereby authorize Lemer, David, Littenberg,
WHEREAS, <u>Google Inc.</u> , Incorporated or otherwise formed in <u>D</u> <u>Amphitheatre Parkway: Mountain View. California 94043</u> (hereafter, the acquired and is destrous of memorializing its acquisition further herein, th	"assignee") is desirous of acquiring, or has
NOW, THEREFORE, for good and valuable consideration the <i>n</i> as 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 count Patent Application, including any and all Inventions, discoveries and othe continuation, continuation-in-part, substitute, release, re-examination or or Patent Application pursuant to any law or treaty, and any patent issuing the assigned Applications in the right to claim such priority or benefit. I have an obligation to convey, my rights in the Assigned Applications to a third part rademark Office, and any other governmental agency in the world, to iss Assigned Applications and to record assignee's ownership thereof. At as further remuneration, to execute and deliver documents prepared at assig such 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 1 affix its signature to this document as well as any other indicia of its accep herein is unenforceable, the requirements of the provision shall remain to ollending portions thereof shall be deemed replaced, to the axtent possib purpose of the offending provision.	entifie right, title and interest in and to the irles, where "Assigned Applications" means the r subject matter described therein, any divisional, ther application claiming priority or benefit to the rom the foregoing. I agree to assign, and hereby ot previously conveyed, nor am I aware of an ty. I hereby authorize the U.S. Patent and sue to assignee all patents resulting from the signee's reasonable request I agree, without gnee's reasonable request I agree, without gnee's rights in the Assigned Applications. Its sole discretion. I agree that the assignee may plance of the provisions hereof. If any provision the full extent permissible by law and the
7/26/2012	
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	(Signalure)
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Jaka Timbel P	
Printed Name of Witness	

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RECORDED: 10/17/2012