Form PTO-1595 (Rev. 03-11) OMB No. 0551-0027 (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.	
Name of conveying party(ies):	2. Name and address of receiving party(ies)	
Sangsun Kim (08/15/2012), William Dailey (08/16/2012), Craig Kaneshiro (08/16/2012), Shane R. Nay (09/10/2012), and Additional name(s) of conveying perty(ies) attached?	Name: Google Inc. Internal Address: Street Address:	
Nature of conveyance/Execution Date(s): Execution Date(s): in parentheses after inventor name	1600 Amphitheatre Parkway	
X Assignment Merger Change of Name		
Security Agreement Joint Research Agreement	City: Mountain View	
Government Interest Assignment	State: California	
Executive Order 9424, Confirmatory License	Country: United States of America Zip: 94043	
Other	Additional name(s) & address(es) Yes X No attached?	
A. Palent Application No.(s) 13/617,669 Additional numbers attached?	B. Patent No.(s)	
5. 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	7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00	
Internal Address: Atty. Dkt.: GOOGLE 3.0-443 Streel Address: 600 South Avenue West	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: 908-654-7866	Deposit Account Number 12-1095	
Email Address: ataylor@idikm.com	Authorized User Name Noelle L. Cacciabeve	
9. Signature: Market & Signature Signature	Dale	
Noelle L. Cacciabeve - 63,075	Total number of pages including cover sheet, attachments, and documents:	
Name of Person Signing		

PATENT

RECORDATION FORM COVER SHEET (PTO-1595) (supplemental sheet)				
Additional Conveying Party(ies)/Execution Date(s) (1. Continued):				
Cornelius O'Sullivan	(08/15/2012)			
Additional Assign	ees (2. Continued)	:		
Assignee Name:	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:	Slate:	Country:	Zip:	
Additional Applications and/or Patents (4. Continued):				
Additional Patent Applicat 4A. Continued:	tion Numbers	Additional Patent Numbers 4B Continued:		
Additional numbers attached? Yes No				

Docket No.:

Docket Number (Optional) ASSIGNMENT OF PATENT APPLICATION GOOGLE 3.0-443 WHEREAS, I, <u>Sanosun Kim</u> of <u>1252 Butterfly Drive</u>: <u>San Jose, California 95120</u>, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "REDUNDANT CHARGING AND DISCHARGING MOSFET DRIVING IN BATTERY BACKUP SYSTEM" (hereafter "Patent Application"), WHEREAS (if the left box is checked), the Patent Application was filed with the U.S. Patent and Tredemark Office on ___, Application Number _ WHEREAS (if the left box is checked), the Patent Application names the following inventors: Sangsun Kim, William Delley, Craio Kaneshko, Shane R. Nav. and Cornelius O'Sullivan (and whereas I hereby authorize Lemer, David, Littenberg, Krumholz & Mentlik, LLP, to Insert In here in brackets (Application No. 13/617.669, filed on 9-14-12) the application number and filling date of the application when known), and WHEREAS, Google Inc., Incorporated or otherwise formed in Detaware and having a place of business at 1600 Amphitheairo Parkway: Mountain View. California 94043 (hereafter, the "assignee") is destrous of acquiring, or has acquired and is desirous of memorializing its acquisition further herein, the entire right, title and interest in earne; 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 palent 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 trensfer 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. (Signature) Printed Name of Witness

PATENT

ASSIGNMENT OF PATENT APPLICATION	Docket Number (Optional)
	GOOGLE 3.0-443
WHEREAS, I, <u>William Dailey</u> of <u>718 Calliornia Way: Redwood C</u> discovered inventions or discoveries, the subject matter of which is described with the subject of the	bed in the palent application antitled
WHEREAS (If the left box is checked), the Palent Application we Trademark Office on Application Number	es filed with the U.S. Patent and , and
WHEREAS (if the left box is checked), the Patent Application no Sangsun Kim, William Daffey, Craig Kaneshiro, Shane R. Nay, and Cornells Lerner, David, Littenberg, Krumholz & Mentilik, LLP, to insert in here in brack on $9-14-12$ the application number and filing date of the appli	is O'Sullivan (and whereas I hereby authoriza kas [Application No. 13/617,669], filed
WHEREAS, <u>Google Inc.</u> , incorporated or otherwise formed in <u>D. Amphitheatre Parkway. Mountain View. California 94043 (hereafter, the acquired and is destrous of mamorializing its acquisition further herein, the</u>	eseignee") is desirous of acquiring, or has
NOW, THEREFORE, for good and valuable consideration the reas follows. I agree to assign, and hereby do assign, to the assignee my expected 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, reissue, re-examination or of Patent Application pursuant to any law or treaty, and any patent Issuing from easign, 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 Assigned Applications and to record assignee's ownership thereof. At assigned Applications and to record assignee's ownership thereof. At assignet Applications are 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 affix its signature to this document as well as any other indicts of its acceptance in the unenforceable, the requirements of the provision shall remain to offending portions thereof shall be deemed replaced, to the extent possible purpose of the offending provision.	ntire right, title and interest in and to the ries, where "Assigned Applications" means the subject matter described therein, any divisional, therein application claiming priority or benefit to the om the foregoing. I agree to assign, and hereby it previously conveyed, nor am I aware of an y. I hereby authorize the U.S. Patent and ue to assignee all patents resulting from the signee's reasonable request I agree, without nee's expense and to provide other cooperation, assaignee's rights in the Assigned Applications. Is sole discretion. I agree that the assignee may stance of the provisions hereof. If any provision the full extent permissible by law and the
8/16/2012 U	Vellem Daley
William Duth Signature of Wilness WILLIAM HUTH Printed Name of Witness	

PATENT

	Docket Number (Optional)	
ASSIGNMENT OF PATENT APPLICATION	Docker Names (options)	
ASSIGNMENT OF FATERY AFFEIGATION	GOOGLE 3.0-443	
WHEREAS, I, <u>Craig Kaneshiro</u> of <u>1653 English Drive</u> ; <u>San Jose, California <u>95129</u>, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled *REDUNDANT CHARGING AND DISCHARGING MOSFET DRIVING IN BATTERY BACKUP SYSTEM* (hereafter "Patent Application"),</u>		
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: Sangsun Kim, William Dalley, Craig Kaneshiro, Shane R. Nav. and Cornellus O'Sullivan (and whereas I hereby authorize Lemer, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. 13/617.669], filed on 9+14-12] 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</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, tills 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 lesuing from the faregoing. 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 replace 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 indicts 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.		
Signature of Witness		
Sangsun Eim- Priffled Name of Witness		
•		

PATENT REEL: 029159 FRAME: 0747 LDLKM

· · · · · · · · · · · · · · · · · · ·	Docket Number (Optional)	
ASSIGNMENT OF PATENT APPLICATION	GOOGLE 3.0-443	
WHEREAS, I. Shane R. Nay of 1238 Eden Ave.; San Jose, California 95117, have Invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "REDUNDANT CHARGING AND DISCHARGING MOSFET DRIVING IN BATTERY BACKUP SYSTEM" (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: Sangsun Kim, William Dailey, Craig Kaneshiro, Shane R. Nay, and Cornellus O'Sullivan (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No13/617,669_, filed on _9-14-12 the application number and filing date of the application when known), and		
WHEREAS, Google Inc., incorporated or otherwise formed in <u>Delaware</u> and having a place of business at <u>1600</u> Amphitheatre Parkway; <u>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 their as follows. I agree to assign, and hereby do assign, to the assignee my Assigned Applications in the United States of America and all other countration and all other countration, continuation-in-part, substitute, relissue, re-examination or examination, continuation-in-part, substitute, relissue, re-examination or examination pursuant to any law or treaty, and any patent Issuing to 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 titrle part trademark Office, and any other governmental agency in the world, to is Assigned Applications and to record assignee's ownership thereof. At a further remuneration, to execute and deliver documents prepared 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 acceleration is unenforceable, the requirements of the provision shall remain to offending portions thereof shall be deemed replaced, to the extent possis purpose of the offending provision.	entire right, title and interest in and to the tries, where "Assigned Applications" means the crosubject matter described therein, any divisional, other application claiming priority or benefit to the from 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 assignee's reasonable request I agree, without gnee's expense and to provide other cooperation, at assignee's rights in the Assigned Applications, the sole discretion. I agree that the assignee may explance of the provisions hereof. If any provision to the full extent permissible by law and the	
(Data)	(organization)	
Signature of Witness		
Printed Name of Witness		

PATENT REEL: 029159 FRAME: 0748

	Docket Number (Optional)
ASSIGNMENT OF PATENT APPLICATION	GOOGLE 3.0-443
WHEREAS, I, Cornellus O'Sullivan of 505 Cypress Point Drive: have invented or discovered inventions or discoveries, the subject matter entitled 'REDUNDANT CHARGING AND DISCHARGING MOSFET DRIV. 'Patent Application'), WHEREAS (if the left box is checked), the Patent Application with Trademark Office on	Apartment 28: Mountain View, California 94043. of which is described in the patent application /ING IN BATTERY BACKUP SYSTEM* (hereafter as filed with the U.S. Patent and, and

PATENT