PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGN	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMEN	ASSIGNMENT		
CONVEYING PARTY	Y DATA				
Name Execution Date					
Subhasree Mandal			10/13/20		
Jim Wanderer				10/17/2011	
RECEIVING PARTY	DATA				
Name:	GOOGLE INC.				
Street Address:	1600 Amphithea	1600 Amphitheatre Parkway			
City:	Mountain View				
State/Country:	CALIFORNIA				
Postal Code:	94043				
Application Number: 13278		3278111	111		
CORRESPONDENC	E DATA				
Fax Number:	(503)439-6	(503)439-6073			
Phone:		503 439-8778			
Email:		ault@bstz.com			
Correspondence will US Mail.	l be sent to the e-ma	nil address first; if tha	'is unsuccessful, it will be	sent via	
Correspondent Name: BLAKELY SOKOLOFF TAYLOR & ZAFMAN, LLP					
Address Line 1:	1279 Oakmead Parkway Sunnyvale, CALIFORNIA 94085-4040				
Address Line 4:	Sunnyvale	, CALIFORNIA 9408)-4040		
ATTORNEY DOCKET NUMBER:		7171P075	7171P075		
NAME OF SUBMITTER:		Dermot G. Mi	Dermot G. Miller		
Total Attachments: 4					

ASSIGNMENT OF PATENT APPLICATION Attorney Docket No.: 7171P075

For good and valuable consideration, the receipt and sufficiency of which is hereby

acknowledged, I/we, the undersigned, Subhasree Mandal, Jim Wanderer

hereby sell, assign, and transfer to ____GOOGLE INC.

a <u>corporation</u> of <u>Delaware</u> (Type of Assignce: e.g., corporation, company, partnership, university, etc.)

having a principal place of business at _____1600 Amphitheatre Parkway Mountain View. CA 94043.

("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all inventions or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which may have a declaration executed by the undersigned prior hereto or concurrently herewith and is entitled

PROVIDING ROUTING INFORMATION TO SUPPORT ROUTING BY PORT GROUPS VIA CORRESPONDING NETWORK PATHS

said patent application also identified as follows (when known):

[I/we hereby authorize an attorney or agent for said Assignee to insert below the application number and filing date of said patent application when known.]

United States Patent Application Number 13/278.111 filed 10/20/2011

and in and to said application (provisional or non-provisional) and all provisional applications, nonprovisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications on any and all said inventions or improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications or and all patents on said inventions or improvements, and all applications or latents and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

Rev. 2/20/2007

PATENT REEL: 027095 FRAME: 0975 covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Each Inventor: Please Sign and Date Below:				
10/13/ Date	_, 20_//	<u> Jublias MaSsl</u> Signature		
8 :		Subhasree Mandal		
	, 20	Printed/Typed Name		
Date		Signature		
		Jim Wanderer Printed/Typed Name		
Date	., 20	Signature		
		Printed/Typed Name		
Date	., 20	Signature		
		Printed/Typed Name		
Date	_, 20	Signature		
		Printed/Typed Name		

Assignment Document Return Address: BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 1279 Oakmead Parkway Sunnyvale, California 94085-4040 (206) 292-8600

ASSIGNMENT OF PATENT APPLICATION

Attorney Docket No.: 7171P075

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we, the undersigned, Subhasree Mandal, Jim Wanderer hereby sell, assign, and transfer to ____GOOGLE INC.

(Type of Assignee: e.g., corporation, company, partnership, university, etc.)

having a principal place of business at ______1600 Amphitheatre Parkway Mountain View, CA 94043.

("Assignee"), and its successors, assigns, and legal representatives, the entire right, fitle, and interest for the United States and all foreign countries, in and to any and all inventions or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which may have a declaration executed by the undersigned prior hereto or concurrently herewith and is entitled

PROVIDING ROUTING INFORMATION TO SUPPORT ROUTING BY PORT GROUPS VIA CORRESPONDING NETWORK PATHS

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United States Patent Application Number 13/278.111 filed 10/20/2011

and in and to said application (provisional or non-provisional) and all provisional applications, nonprovisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all provisional applications, nonprovisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

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Rev: 2/20/2007

PATENT REEL: 027095 FRAME: 0977

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

	, 20	
Date		Signature
and a second second		Subhasree Mandal Printed/Typed Name
<u>0,454€7/7</u> Date	., 20	Signature
		Jim Wanderer
	. 20	Printed/Typed Name
Date	.e. & Y	Signature
		Printed/Typed Name
Date	_e 20	Signature
		Printed/Typed Name
Date	., 20	Signature
		Printed/Typed Name

Each Inventor: Please Sign and Date Below:

Assignment Document Return Address: BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 1279 Oakmead Parkway Sunnyvale, California 94085-4040 (206) 292-8600

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PATENT REEL: 027095 FRAME: 0978

RECORDED: 10/20/2011