

## PATENT ASSIGNMENT

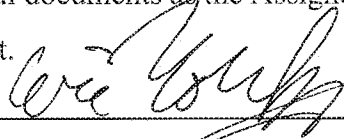
Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Eric R. Northup	05/30/2012
RECEIVING PARTY DATA	
Name:	Google Inc.
Street Address:	1600 Amphitheatre Parkway
City:	Mountain View
State/Country:	CALIFORNIA
Postal Code:	94043
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	13483863
CORRESPONDENCE DATA	
Fax Number:	8777697945
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	650-839-5070
Email:	apsi@fr.com
Correspondent Name:	Daniel J. Burns
Address Line 1:	FISH & RICHARDSON P.C.
Address Line 2:	P.O.BOX 1022
Address Line 4:	MINNEAPOLIS, MINNESOTA 55440-1022
ATTORNEY DOCKET NUMBER:	16113-3132001
NAME OF SUBMITTER:	Joyce E. Abriam
Signature:	/Joyce E. Abriam/
Date:	05/09/2013
Total Attachments: 1 source=Assignment#page1.tif	

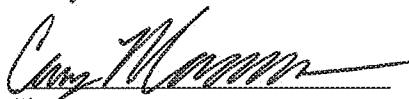
CH \$40.00 13483863

ASSIGNMENT

For valuable consideration, I, ERIC R. NORTHUP of 117 N 40th Street, Seattle, WA 98103, hereby assign to: Google Inc., a corporation of Delaware having a place of business at: 1600 Amphitheatre Parkway, Mountain View, California 94043; and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by me, entitled DEFENSIVE TECHNIQUES TO INCREASE COMPUTER SECURITY, filed May 30, 2012, and assigned U.S. Serial Number 13/483,863, and I authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and I agree for me and my respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

  
ERIC R. NORTHUP

Witnessed by:

  
Signature

Date: 5/29/2012

Cory Maccarrone  
Typed or Printed Name

2204 E Alder St  
Seattle, WA 98122  
Witness Address