

**PATENT ASSIGNMENT**

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Arash Farhoodfar	07/15/2011
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Cortina Systems, Inc.
<b>Street Address:</b>	1376 Bordeaux Drive
<b>City:</b>	Sunnyvale
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94089
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	13190194
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(216)696-8731
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
<b>Email:</b>	hholmes@thepatentattorneys.com
<b>Correspondent Name:</b>	Thomas E Watson
<b>Address Line 1:</b>	127 Public Square, 57th Floor, Key Tower
<b>Address Line 4:</b>	Cleveland, OHIO 44114
<b>ATTORNEY DOCKET NUMBER:</b>	BIGGP106US
<b>NAME OF SUBMITTER:</b>	Thomas E Watson
<b>Total Attachments: 2</b> source=Assignment FARHOODFAR#page1.tif source=Assignment FARHOODFAR#page2.tif	

OP \$40.00 13190194

**ASSIGNMENT**

WHEREAS, I, ARASH FARHOODFAR, citizen of Canada, residing at 87 Penfield Drive, Kanata, Ontario, K2K 1L9, Canada, (hereinafter referred to as the "Assignor"), have made certain inventions and discoveries disclosed in United States Patent Application entitled TIME VARYING DATA PERMUTATION APPARATUS AND METHODS, to be filed in the United States Patent Office (hereinafter referred to as the "Application");

AND WHEREAS, CORTINA SYSTEMS, INC., whose full post office address is 1376 Bordeaux Drive, Sunnyvale, California, 94089, U.S.A. (hereinafter referred to as the "Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions and discoveries, and in and to the Application inclusive of any and all priority rights derived therefrom for any and all countries in the world, and in and to any and all Letters Patent issuing in any and all countries in the world, to be granted for said inventions and discoveries based on said Application or on patent applications filed in any country claiming priority from said Application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I the Assignor, do hereby sell, assign, transfer, and set over unto the Assignee, its successors and assigns, my entire right, title, and interest in and to the inventions and discoveries disclosed in the Application, and in and to the Application and any continuations or divisions thereof and all priority rights derived therefrom, and in and to any and all patent applications and any continuations or divisions thereof filed in any country claiming priority from the Application, and in and to all Letters Patent which may be granted upon the Application or upon patent applications filed in any and all countries in the world including the United States of America, claiming priority from the Application, and in and to any and all reissues, substitutions, or prolongations thereof; the same to be held and enjoyed by the Assignee for its own use and behoof, and for the use and behoof of its successors and assigns, to the full end of the term or terms for which said Letters Patent, or reissues, substitutions, or prolongations thereof may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made;

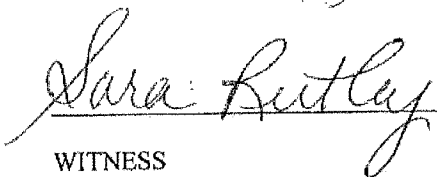
AND I hereby agree that, upon request, and without further consideration, but at the expense of the Assignee, I will communicate to the Assignee or its representatives or nominees any facts known to me respecting said inventions and discoveries and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths and generally aid the Assignee, its successors, assigns, and nominees to obtain and enforce proper patent protection for said inventions and discoveries in all countries, and I further agree to execute any and all further papers which may be necessary or desirable to vest or perfect the title of the Assignee, its successors and assigns, in and to said inventions and discoveries, and in and to any and all Letters

Patent or reissues thereof which may be granted upon application in any and all countries in the world.

AND I hereby authorize and request any official whose duty it is to issue patents to issue each and every Letters Patent to be granted upon the aforesaid Application in any and all countries, and each and every reissue of said Letters Patent, to the Assignee, its successors and assigns, as the assignee of our entire right, title and interest therein, in accordance with this assignment.

THIS assignment made effective immediately.

SIGNED this 15 day of July, 2011.

  
WITNESS

  
ARASH FARHOODFAR