

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Spiros Mancoridis</td> <td>08/08/2012</td> </tr> <tr> <td>Chris Rorres</td> <td>08/08/2012</td> </tr> <tr> <td>Maxim Shevertalov</td> <td>09/07/2012</td> </tr> <tr> <td>Kevin M. Lynch</td> <td>08/08/2012</td> </tr> <tr> <td>Edward Stehle</td> <td>08/08/2012</td> </tr> </tbody> </table>		Name	Execution Date	Spiros Mancoridis	08/08/2012	Chris Rorres	08/08/2012	Maxim Shevertalov	09/07/2012	Kevin M. Lynch	08/08/2012	Edward Stehle	08/08/2012
Name	Execution Date												
Spiros Mancoridis	08/08/2012												
Chris Rorres	08/08/2012												
Maxim Shevertalov	09/07/2012												
Kevin M. Lynch	08/08/2012												
Edward Stehle	08/08/2012												
RECEIVING PARTY DATA													
Name:	Drexel University												
Street Address:	3141 Chestnut Street												
City:	Philadelphia												
State/Country:	PENNSYLVANIA												
Postal Code:	19104												
PROPERTY NUMBERS Total: 1													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13575196</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13575196								
Property Type	Number												
Application Number:	13575196												
CORRESPONDENCE DATA													
Fax Number:	2155683439												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
Phone:	215-568-3100												
Email:	assignments@woodcock.com												
Correspondent Name:	Woodcock Washburn LLP												
Address Line 1:	2929 Arch Street												
Address Line 2:	Cira Centre, 12th Floor												
Address Line 4:	Philadelphia, PENNSYLVANIA 19104												
ATTORNEY DOCKET NUMBER:	DXU-0436 / 09-111D												
NAME OF SUBMITTER:	Valerie Chicchi												

CH \$40.00 13575196

Total Attachments: 10

source=executed_assignments#page1.tif
source=executed_assignments#page2.tif
source=executed_assignments#page3.tif
source=executed_assignments#page4.tif
source=executed_assignments#page5.tif
source=executed_assignments#page6.tif
source=executed_assignments#page7.tif
source=executed_assignments#page8.tif
source=executed_assignments#page9.tif
source=executed_assignments#page10.tif

ASSIGNMENT

WHEREAS, I, **Spiros Mancoridis** citizen of **United States**, residing at **776 South 2nd Street, Philadelphia, PA 19147**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **DXU-0436 / 09-111D** (“the invention”), assigned serial number **13/575,196**, which is entitled **DETECTION, DIAGNOSIS, AND MITIGATION OF SOFTWARE FAULTS** (“the subject application”), and which claims priority to **United States** patent application number **61/299,148** filed **January 28, 2010** (“the priority application”). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

AND WHEREAS, **Drexel University**, ASSIGNEE, having a place of business at **3141 Chestnut Street, Philadelphia, PA 19104**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors’ certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming

the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 8th day of August, year of 2012.

[Signature]
Spiros Mancoridis

STATEMENT OF NOTARY PUBLIC

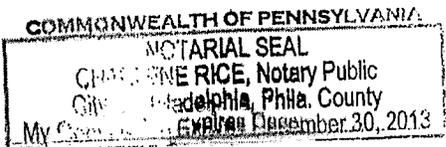
STATE OF Pennsylvania:

: SS

COUNTY OF Philadelphia

On this 8th day of August, year of 2012, before me personally came the above named Spiros Mancoridis to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

[Signature]
Notary Public



ASSIGNMENT

WHEREAS, I, **Chris Rorres** citizen of **United States**, residing at **411 Millers Lane, Wynnewood, PA 19096**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **DXU-0436 / 09-111D** ("the invention"), assigned serial number **13/575,196**, which is entitled **DETECTION, DIAGNOSIS, AND MITIGATION OF SOFTWARE FAULTS** ("the subject application"), and which claims priority to **United States** patent application number **61/299,148** filed **January 28, 2010** ("the priority application"). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

AND WHEREAS, **Drexel University**, ASSIGNEE, having a place of business at **3141 Chestnut Street, Philadelphia, PA 19104**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal

representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 8th day of August, year of 2012.

Chris Rorres
Chris Rorres

STATEMENT OF NOTARY PUBLIC

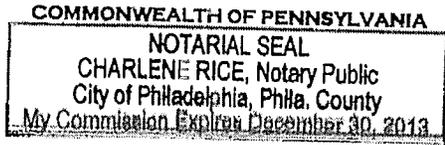
STATE OF Pennsylvania:

: SS

COUNTY OF Philadelphia:

On this 8th day of August, year of 2012, before me personally came the above named Chris Rorres to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

Charlene Rice
Notary Public



ASSIGNMENT

WHEREAS, I, **Maxim Shevertalov** citizen of **United States**, residing at **113 Pine Dr., Phoenixville, PA 19460**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **DXU-0436 / 09-111D** ("the invention"), assigned serial number **13/575,196**, which is entitled **DETECTION, DIAGNOSIS, AND MITIGATION OF SOFTWARE FAULTS** ("the subject application"), and which claims priority to **United States** patent application number **61/299,148** filed **January 28, 2010** ("the priority application"). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

AND WHEREAS, **Drexel University**, ASSIGNEE, having a place of business at **3141 Chestnut Street, Philadelphia, PA 19104**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal

DOCKET NO.: DXU-0436 / 09-111D

representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 7 day of Sept, year of 2012.



Maxim Shevertalov

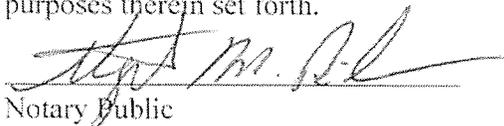
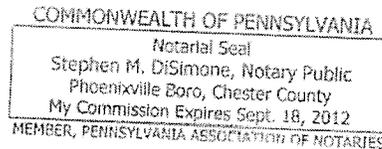
STATEMENT OF NOTARY PUBLIC

STATE OF PA :

: SS

COUNTY OF Chester :

On this 7 day of Sept, year 2012, before me personally came the above named Maxim Shevertalov to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.


Notary Public

ASSIGNMENT

WHEREAS, I, **Kevin M. Lynch** citizen of **United States**, residing at **63 Michaelson Drive, Mount Laurel, NJ 08054**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **DXU-0436 / 09-111D** (“the invention”), assigned serial number **13/575,196**, which is entitled **DETECTION, DIAGNOSIS, AND MITIGATION OF SOFTWARE FAULTS** (“the subject application”), and which claims priority to **United States** patent application number **61/299,148** filed **January 28, 2010** (“the priority application”). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

AND WHEREAS, **Drexel University**, ASSIGNEE, having a place of business at **3141 Chestnut Street, Philadelphia, PA 19104**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors’ certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming

the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 8th day of August, year of 2012.

[Signature]
Kevin M. Lynch

STATEMENT OF NOTARY PUBLIC

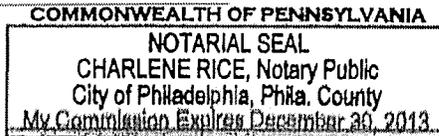
STATE OF Pennsylvania:

: SS

COUNTY OF Philadelphia

On this 8th day of August, year of 2012, before me personally came the above named _____ to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

Notary Public



ASSIGNMENT

WHEREAS, I, **Edward Stehle** citizen of **United States**, residing at **944F North Orianna Street, Philadelphia, PA 19123**, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number **DXU-0436 / 09-111D** ("the invention"), assigned serial number **13/575,196**, which is entitled **DETECTION, DIAGNOSIS, AND MITIGATION OF SOFTWARE FAULTS** ("the subject application"), and which claims priority to **United States** patent application number **61/299,148** filed **January 28, 2010** ("the priority application"). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

AND WHEREAS, **Drexel University**, ASSIGNEE, having a place of business at **3141 Chestnut Street, Philadelphia, PA 19104**, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming

the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 8th day of August, year of 2012.

Edward Stehle
Edward Stehle

STATEMENT OF NOTARY PUBLIC

STATE OF Pennsylvania:

: SS

COUNTY OF Philadelphia:

On this 8th day of August, year of 2012, before me personally came the above named Edward Stehle to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

Charlene Rice
Notary Public

