504692220 12/18/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT4738941 Stylesheet Version v1.2

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ANUP GHOSH	10/23/2009
YIH HUANG	10/26/2009
JIANG WANG	10/23/2009
ANGELOS STAVROU	10/22/2009

RECEIVING PARTY DATA

Name:	GEORGE MASON UNIVERSITY
Street Address:	4400 UNIVERSITY DRIVE
City:	FAIRFAX
State/Country:	VIRGINIA
Postal Code:	22030

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15841913

CORRESPONDENCE DATA

Fax Number: (202)842-7899

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 703-456-8000

Email: vtevalt@cooley.com

Correspondent Name: COOLEY LLP

Address Line 1:1299 PENNSYLVANIA AVENUEAddress Line 2:SUITE 700, ATTN: PATENT GROUPAddress Line 4:WASHINGTON, D.C. 20004-2400

ATTORNEY DOCKET NUMBER: INVI-003/04US 314067-2051

NAME OF SUBMITTER: DAVID W. HOPKINS

SIGNATURE: /David W. Hopkins/

DATE SIGNED: 12/18/2017

Total Attachments: 4

source=Inventors to GMU#page1.tif source=Inventors to GMU#page2.tif

PATENT 504692220 REEL: 044420 FRAME: 0407

source=Inventors to GMU#page3.tif source=Inventors to GMU#page4.tif

> PATENT REEL: 044420 FRAME: 0408

Docket Number: GMU.08.040U

ASSIGNMENT OF INVENTION

WHEREAS, Anup Ghosh, hereinafter called the "Assignor," has invented a new and useful invention entitled, "Web Canaries: a Large-scale Distributed Sensor for Detecting Malicious Web Sites via a Virtualized Web Browser" for which the United States Provisional Patent Application entitled, "Large-Scale Distributed Sensor for Detecting Malicious Web Sites via a Virtualized Web Browser," Provisional Application number 61/096,591 was filed September 12, 2008, and for which the United States Letters Patent Application entitled, "Distributed Sensor for Detecting Malicious Software," application number 12/558,841 was filed September 14, 2009.

WHEREAS, George Mason University, of Fairfax, Virginia, hereinafter called the "Assignee", whose mailing address is: 4400 University Drive, Fairfax, VA 22030, is desirous of acquiring the entire right, title and interest in and to said invention, the applications above identified, including any provisionals, nonprovisionals, continuations, divisionals, continuations-in-part, and any applications claiming benefit to said applications, and in, to and under any Letters Patent which may be granted thereof, including all reissues, reexaminations, and extensions thereof.

NOW, THEREFORE, in consideration of good and valuable and legally sufficient considerations, the receipt of which by said Assignor from the said Assignee is hereby acknowledged, the said Assignor has sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignee, the entire, right, title and interest for the United States in and to the invention and application hereinabove identified, including any provisionals, nonprovisionals, continuations, divisionals, continuations-in-part, and any applications claiming benefit to said applications, and any Letters Patent of the United States that may issue for said invention, together with the entire right, title and interest in and to said invention and applications for Patent and Patent therefore, in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; to have and to hold for the sole and exclusive use and benefit of the said Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said inventions may issue.

And the said Assignor does hereby covenant and agree, for himself and his legal representatives, that he will assist the said Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the said Assignee may elect to make covering the invention herein identified, as hereinabove set forth; in vesting in the said Assignee like exclusive title in and to all such other applications and Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Patent herein contemplated; and that they will execute and deliver to the said Assignee any and all additional papers which may be requested by the said Assignee to fully carry out the terms of this Assignment.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue Letters Patent to the said Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the said.	Assignor has hereunto set his hands and affixed his seal.
Date: 10/23/09	May Kollosh
WITNESSED:	Anup Ghosh
Date: 40/23/09	the of last

PATENT REEL: 044420 FRAME: 0409 Docket Number: GMU.08.040U

ASSIGNMENT OF INVENTION

WHEREAS, Yih Huang, hereinafter called the "Assignor," has invented a new and useful invention entitled, "Web Canaries: a Large-scale Distributed Sensor for Detecting Malicious Web Sites via a Virtualized Web Browser" for which the United States Provisional Patent Application entitled, "Large-Scale Distributed Sensor for Detecting Malicious Web Sites via a Virtualized Web Browser," Provisional Application number 61/096,591 was filed September 12, 2008, and for which the United States Letters Patent Application entitled, "Distributed Sensor for Detecting Malicious Software," application number 12/558,841 was filed September 14, 2009.

WHEREAS, George Mason University, of Fairfax, Virginia, hereinafter called the "Assignee", whose mailing address is: 4400 University Drive, Fairfax, VA 22030, is desirous of acquiring the entire right, title and interest in and to said invention, the applications above identified, including any provisionals, nonprovisionals, continuations, divisionals, continuations-in-part, and any applications claiming benefit to said applications, and in, to and under any Letters Patent which may be granted thereof, including all reissues, reexaminations, and extensions thereof.

NOW, THEREFORE, in consideration of good and valuable and legally sufficient considerations, the receipt of which by said Assignor from the said Assignee is hereby acknowledged, the said Assignor has sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignee, the entire, right, title and interest for the United States in and to the invention and application hereinabove identified, including any provisionals, nonprovisionals, continuations, divisionals, continuations-in-part, and any applications claiming benefit to said applications, and any Letters Patent of the United States that may issue for said invention, together with the entire right, title and interest in and to said invention and applications for Patent and Patent therefore, in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; to have and to hold for the sole and exclusive use and benefit of the said Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said inventions may issue.

And the said Assignor does hereby covenant and agree, for himself and his legal representatives, that he will assist the said Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the said Assignee may elect to make covering the invention herein identified, as hereinabove set forth; in vesting in the said Assignee like exclusive title in and to all such other applications and Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Patent herein contemplated; and that they will execute and deliver to the said Assignee any and all additional papers which may be requested by the said Assignee to fully carry out the terms of this Assignment.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue Letters Patent to the said Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the said Assignor has herefunto set his hands and affixed his seal.

,

WITNESSED:

Date: 10/26/08

Drive Carrier

PATENT

REEL: 044420 FRAME: 0410

Docket Number: GMU.08.040U

ASSIGNMENT OF INVENTION

WHEREAS, Jiang Wang, hereinafter called the "Assignor," has invented a new and useful invention entitled, "Web Canaries: a Large-scale Distributed Sensor for Detecting Malicious Web Sites via a Virtualized Web Browser" for which the United States Provisional Patent Application entitled, "Large-Scale Distributed Sensor for Detecting Malicious Web Sites via a Virtualized Web Browser," Provisional Application number 61/096,591 was filed September 12, 2008, and for which the United States Letters Patent Application entitled, "Distributed Sensor for Detecting Malicious Software," application number 12/558,841 was filed September 14, 2009.

WHEREAS, George Mason University, of Fairfax, Virginia, hereinafter called the "Assignee", whose mailing address is: 4400 University Drive, Fairfax, VA 22030, is desirous of acquiring the entire right, title and interest in and to said invention, the applications above identified, including any provisionals, nonprovisionals, continuations, divisionals, continuations-in-part, and any applications claiming benefit to said applications, and in, to and under any Letters Patent which may be granted thereof, including all reissues, reexaminations, and extensions thereof.

NOW, THEREFORE, in consideration of good and valuable and legally sufficient considerations, the receipt of which by said Assignor from the said Assignee is hereby acknowledged, the said Assignor has sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignee, the entire, right, title and interest for the United States in and to the invention and application hereinabove identified, including any provisionals, nonprovisionals, continuations, divisionals, continuations-in-part, and any applications claiming benefit to said applications, and any Letters Patent of the United States that may issue for said invention, together with the entire right, title and interest in and to said invention and applications for Patent and Patent therefore, in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; to have and to hold for the sole and exclusive use and benefit of the said Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said inventions may issue.

And the said Assignor does hereby covenant and agree, for himself and his legal representatives, that he will assist the said Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the said Assignee may elect to make covering the invention herein identified, as hereinabove set forth; in vesting in the said Assignee like exclusive title in and to all such other applications and Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Patent herein contemplated; and that they will execute and deliver to the said Assignee any and all additional papers which may be requested by the said Assignee to fully carry out the terms of this Assignment.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue Letters Patent to the said Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the said Assignor has hereunto set his hands and affixed his seal.

WITNESSED:

Date: $\frac{10/23/2009}{10/33/2009}$

PATENT REEL: 044420 FRAME: 0411 ASN3.08.040

Docket Number: GMU.08.040U

ASSIGNMENT OF INVENTION

WHEREAS, Angelos Stavrou, hereinafter called the "Assignor," has invented a new and useful invention entitled, "Web Canaries: a Large-scale Distributed Sensor for Detecting Malicious Web Sites via a Virtualized Web Browser" for which the United States Provisional Patent Application entitled, "Large-Scale Distributed Sensor for Detecting Malicious Web Sites via a Virtualized Web Browser," Provisional Application number 61/096,591 was filed September 12, 2008, and for which the United States Letters Patent Application entitled, "Distributed Sensor for Detecting Malicious Software," application number 12/558,841 was filed September 14, 2009.

WHEREAS, George Mason University, of Fairfax, Virginia, hereinafter called the "Assignee", whose mailing address is: 4400 University Drive, Fairfax, VA 22030, is desirous of acquiring the entire right, title and interest in and to said invention, the applications above identified, including any provisionals, nonprovisionals, continuations, divisionals, continuations-in-part, and any applications claiming benefit to said applications, and in, to and under any Letters Patent which may be granted thereof, including all reissues, reexaminations, and extensions thereof.

NOW, THEREFORE, in consideration of good and valuable and legally sufficient considerations, the receipt of which by said Assignor from the said Assignee is hereby acknowledged, the said Assignor has sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignee, the entire, right, title and interest for the United States in and to the invention and application hereinabove identified, including any provisionals, nonprovisionals, continuations, divisionals, continuations-in-part, and any applications claiming benefit to said applications, and any Letters Patent of the United States that may issue for said invention, together with the entire right, title and interest in and to said invention and applications for Patent and Patent therefore, in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; to have and to hold for the sole and exclusive use and benefit of the said Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said inventions may issue.

And the said Assignor does hereby covenant and agree, for himself and his legal representatives, that he will assist the said Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the said Assignee may elect to make covering the invention herein identified, as hereinabove set forth; in vesting in the said Assignee like exclusive title in and to all such other applications and Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Patent herein contemplated; and that they will execute and deliver to the said Assignee any and all additional papers which may be requested by the said Assignee to fully carry out the terms of this Assignment.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue Letters Patent to the said Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the said As	ssignor has berequito set his hands and affixed his se
Date: 10/22/2009	Mhu
<i>(</i> - <i>f</i> -	Aggelos Stavrou
WITNESSED:	
Date: 10 /22 / 09	Vatricia Carcamo
Date: 10/22/09	126

PATENT REEL: 044420 FRAME: 0412

RECORDED: 12/18/2017