504706943 12/28/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JEFFREY THOMAS JOHNS	10/27/2017
BRIAN SANFORD JONES	12/16/2017
SCOTT ERIC COULL	10/27/2017

RECEIVING PARTY DATA

Name:	FIREEYE, INC.
Street Address:	1440 MCCARTHY BLVD.
City:	MILPITAS
State/Country:	CALIFORNIA
Postal Code:	95035

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15796680

CORRESPONDENCE DATA

Fax Number: (714)546-9035

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: (714) 641-5100 Email: ingo@rutan.com

Correspondent Name: RUTAN & TUCKER, LLP

Address Line 1: 611 ANTON BLVD., SUITE 1400 Address Line 4: COSTA MESA, CALIFORNIA 92626

ATTORNEY DOCKET NUMBER: 101966.0143P P01-1700	
NAME OF SUBMITTER:	WILLIAM W. SCHAAL, REG. NO. 39018
SIGNATURE:	/WILLIAM W. SCHAAL/
DATE SIGNED:	12/28/2017

Total Attachments: 4

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PATENT REEL: 044500 FRAME: 0455 504706943

ASSIGNMENT

WHEREAS, the undersigned, inventors,

Jeffrey Thomas Johns	of	Leesburg, VA
Brian Sanford Jones	of	Morrisville, NC
Scott Eric Coull	of	Cary, NC

(referred to hereinafter as "ASSIGNOR(S)") have invented a certain invention entitled

SYSTEM AND METHOD FOR ANALYZING BINARY CODE FOR MALWARE CLASSIFICATION USING ARTIFICIAL NEURAL NETWORK TECHNIQUES

for which a patent	application for Letters of Patent of the	e United States of America was filed herewith
(or on	, serial number); which together with related
experimental data,	trade secret, and other know-how is re	ferred to hereinafter as the INVENTION;

WHEREAS <u>FireEye</u>, <u>Inc.</u>, a Delaware corporation having its principal place of business at <u>1440 McCarthy Blvd.</u>, <u>Milpitas</u>, <u>California 95035</u>, <u>USA</u> (referred to hereinafter as "ASSIGNEE"), is desirous of acquiring all entire right, title and interest in, to and under said INVENTION, and in, to and under Letters Patent or similar legal protection to be or having been obtained therefor in the United States of America, its territorial possessions and in any and all countries foreign thereto; and

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sells, assigns, transfers and sets over unto the ASSIGNEE, its successors and assigns the entire title, right and interest in and to the INVENTION, and to all Letters Patent or similar legal protection arising therefrom, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for said INVENTION by said application and all provisional, non-provisional, utility, design, continuation, continuation-in-part, divisional, renewal, substitute, reissue or reexamination thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted, including all priority rights under any International Convention.

ASSIGNOR(S) further covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment; and

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said INVENTION, including the patent application listed above, and any Letters Patent and legal equivalents in foreign countries issuing therefrom as may be known and accessible to ASSIGNOR(S), and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said invention and said Letters Patent and said equivalents thereof in any foreign country which may be necessary or desirable to carry out the purposes thereof.

Atty. Docket No. 101966.043P

ASSIGNOR(S) and ASSIGNEE each covenant to perform all acts and execute and deliver all documents as may be necessary or appropriate to carry out the intent and purposes of this assignment.

This assignment embodies the entire understanding of ASSIGNOR(S) and ASSIGNEE and supersedes and replaces any and all pre-existing assignments or understandings between ASSIGNOR(S) and ASSIGNEE. No amendment or modification of this assignment shall be valid or binding upon ASSIGNOR(S) or ASSIGNEE unless made in writing and signed on behalf of each of ASSIGNOR(S) and ASSIGNEE by their respective duly authorized representative.

WITNESS my hand at	Leesburg	, VA	, this 27th day of	October	2017
, —	City	State		Month	
Juffrey Thomas Johns	John				
WITNESS my hand at		,	, this day of		2017
	City	State		Month	
D: 0 6 11					
Brian Sanford Jones					
WITNESS my hand at Ca	ary	, NC	, this 27thday of C	october	2017
	City	State		Month	
Soft Could		_			
Scott Eric Coull					

Atty. Docket No. 101966.043P P01-1700

ASSIGNMENT

WHEREAS, the undersigned, inventors,

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Brian Sanford Jones	of	Morrisville, NC
Scott Eric Coull	of	Cary, NC

(referred to hereinafter as "ASSIGNOR(S)") have invented a certain invention entitled

SYSTEM AND METHOD FOR ANALYZING BINARY CODE FOR MALWARE CLASSIFICATION USING ARTIFICIAL NEURAL NETWORK TECHNIQUES

for which a pat	tent application for Letter	s of Patent of the	United States	of America wa	s filed herewith
(or on	, serial r	number		_); which toget	her with related
experimental d	ata, trade secret, and othe	r know-how is ref	erred to herein	after as the INV	/ENTION;

WHEREAS <u>FireEye</u>, <u>Inc.</u>, a Delaware corporation having its principal place of business at <u>1440 McCarthy Blvd.</u>, <u>Milpitas</u>, <u>California 95035</u>, <u>USA</u> (referred to hereinafter as "ASSIGNEE"), is desirous of acquiring all entire right, title and interest in, to and under said INVENTION, and in, to and under Letters Patent or similar legal protection to be or having been obtained therefor in the United States of America, its territorial possessions and in any and all countries foreign thereto; and

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sells, assigns, transfers and sets over unto the ASSIGNEE, its successors and assigns the entire title, right and interest in and to the INVENTION, and to all Letters Patent or similar legal protection arising therefrom, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for said INVENTION by said application and all provisional, non-provisional, utility, design, continuation, continuation-in-part, divisional, renewal, substitute, reissue or reexamination thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted, including all priority rights under any International Convention.

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Atty. Docket No. 101966.043P

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WITNESS my hand at			, this	day of _		2017
, -	City	State		•	Month	
Jeffrey Thomas Johns		-				
WITNESS my hand at	Morrisville	,NC	, this _61	th day of _	December	2017
	City	State			Month	
Brandwood Jones	2					
Brian Sanford Jones		=				
WITNESS my hand at		.,	, this	day of _		2017
	City	State			Month	
Scott Eric Coull		_				

Atty. Docket No. 101966.043P

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