PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4482170

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SAI OMKAR VASHISHT	05/23/2017
PHUNG-TE HA	05/22/2017
SUSHANT PAITHANE	05/24/2017
SUMER DESHPANDE	05/23/2017

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:	15627272

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: patents@rutan.com **Correspondent Name: RUTAN & TUCKER, LLP** Address Line 1: 611 ANTON BLVD.

Address Line 2: **SUITE 1400**

Address Line 4: COSTA MESA, CALIFORNIA 92626

ATTORNEY DOCKET NUMBER:	101966.0127P P01-1644.02
NAME OF SUBMITTER:	WILLIAM W. SCHAAL, REG. NO. 39018
SIGNATURE:	/William W. Schaal/
DATE SIGNED:	06/28/2017

Total Attachments: 4

source=2017-06-19 Assignment signed 101966-0127P#page1.tif source=2017-06-19_Assignment_signed_101966-0127P#page2.tif

PATENT REEL: 042848 FRAME: 0916 504435469

 $source = 2017\text{-}06\text{-}19_Assignment_signed_101966\text{-}0127P\#page3.tif} \\ source = 2017\text{-}06\text{-}19_Assignment_signed_101966\text{-}0127P\#page4.tif}$

PATENT REEL: 042848 FRAME: 0917

ASSIGNMENT

WHEREAS, the undersigned, inventors,

Sai Omkar Vashisht	of	Milpitas, CA
Phung-Te Ha	of	Milpitas, CA
Sushant Paithane	of	Pune, Maharashtra, India
Sumer Deshpande	of	Milpitas, CA

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

ADAPTIVE VIRTUAL MACHINE SNAPSHOT UPDATE FRAMEWORK FOR MALWARE BEHAVIORAL ANALYSIS

for whi	ich a pate	nt app	olication	for Letters of	Paten	t of the	e United	Stat	es of A	America wa	s fil	led herew	zith
(or on						, seria	al numb	er);
which	together	with	related	experimental	data,	trade	secret,	and	other	know-how	is	referred	to
hereina	fter as the	e INV	ENTIO?	٧:									

WHEREAS <u>FireEye</u>, <u>Inc.</u>, a corporation having its principal place of business at 1440 McCarthy Blvd., Milpitas, California 95035, USA (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,

Atty. Docket No. 101966.0127P P01-1644.02

2740/101966-0127P 10769596.1 a03/28/17 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.

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 _	Mil pilas	, <u>(A</u> State	, this <u> </u>	May Month	201,6 7
Sai Omkar Vashisht	per	_			
WITNESS my hand at _	Milpitas City	, CA	, this <u>22</u> day of _	May Month	201\$7
Fhung-Te Ha		_			
WITNESS my hand at _	City	_,State	, this day of _	Month	2016
Sushant Paithane		_			
WITNESS my hand at _	Milpitas City	, <u>CA</u> State	, this $\frac{23}{}$ day of _	May Month	201¢ 7-
Sumer Deshpande		_			

2740/101966-0127P 10769596.1 a03/28/17 Atty. Docket No. 101966.0127P P01-1644.02

ASSIGNMENT

WHEREAS, the undersigned, inventors,

Sai Omkar Vashisht	of	Milpitas, CA
Phung-Te Ha	of	Milpitas, CA
Sushant Paithane	of	Pune, Maharashtra, India
Sumer Deshpande	of	Milpitas, CA

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

ADAPTIVE VIRTUAL MACHINE SNAPSHOT UPDATE FRAMEWORK FOR MALWARE BEHAVIORAL ANALYSIS

for which a patent application for Letters of	f Paten	t of th	e United	l Stat	es of A	America was	file	ed herew	ith
or on		, seri	al numb	er					٦.
which together with related experimental	data,	trade	secret,	and	other	know-how	is	referred	to
nereinafter as the INVENTION:									

WHEREAS FireEye, Inc., a corporation having its principal place of business at 1440 McCarthy Blvd., Milpitas, California 95035, USA (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,

- | -

2740/101966-0127P 10769596.1 a03/28/17

Atty. Docket No. 101966.0127P P01-1644-02

PATENT

REEL: 042848 FRAME: 0920

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.

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 _		•	, this	day of		2016
WITNESS my hand at _	City	State	•		Month	2010
Sai Omkar Vashisht		Novindada da anticologia de la constanta de la				
WITNESS my hand at _	City	, <u> </u>	, this	day of		2016
	City	State			Month	
Phung-Te Ha						
WITNESS my hand at _	PUNE	MH, I NDJ	<u> A</u> this <u>2 </u>	1 day of _	MAY	201\$ 7
Zadin		State			Month	
Sushant Paithane						
WITNESS my hand at	Ch	,	_, this	_ day of _		2016
	Спу	State			Month	
Sumer Deshpande						
740/101956-0127P 0769596-1-a03/28/17		-2-			Atty Docket No.	101966.0127P

PATENT REEL: 042848 FRAME: 0921

RECORDED: 06/28/2017