PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Samir D. SAKLIKAR	07/12/2011
Aditya KUPPA	07/08/2011
Dennis Ray MOREAU	11/03/2011
Riaz ZOLFONOON	06/30/2011

RECEIVING PARTY DATA

Name:	EMC Corporation
Street Address:	176 South Street
City:	Hopkinton
State/Country:	MASSACHUSETTS
Postal Code:	01748

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13172979

CORRESPONDENCE DATA

Fax Number: (508)366-4688 Phone: 508-616-2900

Email: docket@bainwoodhuang.com

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

via US Mail.

Correspondent Name: M. Ari Behar, Esq.

Address Line 1: Bainwood, Huang & Associates, Inc.

Address Line 2: 2 Connector Road

Address Line 4: Westborough, MASSACHUSETTS 01581

ATTORNEY DOCKET NUMBER: 1048-078 NAME OF SUBMITTER: M. Ari Behar, Esq.

PATENT

REEL: 027168 FRAME: 0611

Total Attachments: 18 source=1048-078-Assignment#page1.tif source=1048-078-Assignment#page2.tif source=1048-078-Assignment#page3.tif source=1048-078-Assignment#page4.tif source=1048-078-Assignment#page5.tif source=1048-078-Assignment#page6.tif source=1048-078-Assignment#page7.tif source=1048-078-Assignment#page8.tif source=1048-078-Assignment#page9.tif source=1048-078-Assignment#page10.tif source=1048-078-Assignment#page11.tif source=1048-078-Assignment#page12.tif source=1048-078-Assignment#page13.tif source=1048-078-Assignment#page14.tif source=1048-078-Assignment#page15.tif source=1048-078-Assignment#page16.tif source=1048-078-Assignment#page17.tif source=1048-078-Assignment#page18.tif

ASSIGNMENT

WHEREAS, we, Samir D. Saklikar, Aditya Kuppa, Dennis Ray Moreau, and Riaz Zolfonoon, have invented an invention comprising and/or embodying certain improvements or discoveries or both as described in an application for Letters Patent of the United States entitled **DETECTING ADVANCED PERSISTENT THREATS** the specification of which:

[]	is being executed on even date herewith and is about to be filed in the United States Patent Office;
[X]	was filed on June 30, 2011 as U.S. Application No. 13/172,979;
[]	was patented under U.S. Patent Noonon

WHEREAS, EMC Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having a usual place of business at 176 South Street, Hopkinton, Massachusetts 01748, USA desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey to ASSIGNEE all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

AND we hereby authorize our attorneys Bainwood Huang & Associates L	LC to
insert here in parentheses () the
application number and filing date of said Application (or foreign counterpart app	lication
to facilitate the recording or other official processing of this Assignment.	

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals as set forth below:

Attorney Docket No.: 1048-078 Inventor's Signature Print full name of first inventor: Samir D. Saklikar H#32, Saraswathi Nilaya, S G Palya Residence: C V Raman Nagar Bangalore, Karnataka 560093 INDIA India Citizenship: Mailing Address: Same as above Venue: Bangalore, India. On this 12 day of 3000, 2011, then personally appeared before me the above-named **Samir D. Saklikar** known to me through satisfactory evidence of identification [] employee identification card; [| driver's license; [] (other) to be the person whose name is subscribed to No. 97054 the foregoing Assignment and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained. Official Seal Notary Public D. K. PRAKASH NOTARY PUBLIC BANGALORE

Print Name:

1 2 JUL 2011

PATENT/Joint Assignment

PRINCIPAL OFFICE IN Indiranagar, Bangalore - 560 075. India

My Commission expires M. 3EXPIRES / DEC-13, 20

<u>,</u>	
Date: 8 7 (201)	Writh
1	Inventor's Signature
Print full name of second inventor:	Aditya Kuppa
Residence:	259/A2 7 th Cross, 27 th Main, HSR Layout
	Bangalore, Karnataka 560029 INDIA
Citizenship:	India
Mailing Address:	Same as above
Venue: Rambalon	
- Societies -	
On this % day of 7	, 2011, then personally appeared before
me the above-named Aditya Kuppa know	wn to me through satisfactory evidence of
identification [Ph] employee identification	
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8/	Notary Public S. BALU, B.com NOTARY NOTARY
MOTARY	GOVI OF INDIA _ 1
MOTARY	GOVT OF INDIA

Date:	
	Inventor's Signature
Print full name of third inventor:	Dennis Ray Moreau
Residence:	75 Orchard Avenue, Apt. 3
	Providence, RI 02906
Citizenship:	United States of America
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	
COUNTY OF	
On this day of	, 2011, then personally appeared before
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free act and deed for the purposes the	erein contained.
	Notary Public
	Print Name:
	My Commission expires / /

Date:	
	Inventor's Signature
Print full name of fourth inventor:	Riaz Zolfonoon
Residence:	152 Annursnac Hill Rd., Concord, MA 01742
Citizenship:	United States of America
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	
me the above-named Riaz Zolfonoor identification [] employee identificat	, 2011, then personally appeared before hown to me through satisfactory evidence of ion card; [] driver's license; [] (other) to be the person whose name is subscribed to wledged that he/she executed the same as his/her
free act and deed for the purposes the	
	Notary Public
	Print Name:
	My Commission expires//

ASSIGNMENT

WHEREAS, we, Samir D. Saklikar, Aditya Kuppa, Dennis Ray Moreau, and Riaz Zolfonoon, have invented an invention comprising and/or embodying certain improvements or discoveries or both as described in an application for Letters Patent of the United States entitled DETECTING ADVANCED PERSISTENT THREATS the specification of which:

	is being executed on	even date	herewith and is	about to b	
	United States Patent	Office;			
1X1	was filed on June 30	2011 as U	I.S. Application		2.979:
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1 1					

WHEREAS, EMC Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having a usual place of business at 176 South Street, Hopkinton, Massachusetts 01748, USA desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey to ASSIGNEE all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

PATENT

REEL: 027168 FRAME: 0619

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

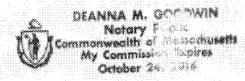
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IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals as set forth below:

	Inventor's Signature
Print full name of first inventor:	Samir D. Saklikar
Residence:	H#32, Saraswathi Nilaya, S G Palya
	C V Raman Nagar
	Bangalore, Karnataka 560093 INDIA
Vitizenship:	
Mailing Address:	Same as above
/enue:	
On thisday of	, 2011, then personally appeared before
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	Inventor's Signature
Print full name of second inventor:	Aditya Kuppa
Residence:	259/A2 7 th Cross, 27 th Main, HSR Layout
	Bangalore, Karnataka 560029 INDIA
Citizenship:	Inda
Mailing Address:	Same as above
Venue:	
On this day of	, 2011, then personally appeared before
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	/ Inventor's Signature
Print full name of third inventor:	Dennis Ray Moreau
Residence:	75 Orchard Avenue, Apt. 3
	Providence, RI 02906
Citizenship:	United States of America
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	
me the above-named Dennis Ray M	2011, then personally appeared before oreau known to me through satisfactory evidence
On this 3 day of 1011/11/11 me the above-named Dennis Ray M	(2011, then personally appeared before oreau known to me through satisfactory evidence ication card; (1) driver's license; (1) (other)
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Date:	
	Inventor's Signature
Print full name of fourth inventor:	Riaz Zolfonoon
Residence:	152 Annursnac Hill Rd., Concord, MA 01742
Citizenship:	United States of America
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	
COUNTY OF	
On this day of	, 2011, then personally appeared before
	n known to me through satisfactory evidence of its ion card; [] driver's license; [] (other)
	to be the person whose name is subscribed to
the foregoing Assignment and acknow free act and deed for the purposes the	viedged that he/she executed the same as his/her erein contained.
	Notary Public
	Print Name:
	My Commission expires//

PATENT

REEL: 027168 FRAME: 0624

ASSIGNMENT

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[]	is being executed on even date herewith and is United States Patent Office;	about to be filed in the
[X]	was filed on June 30, 2011 as U.S. Application	No. <u>13/172,979</u> ;
[]	was patented under U.S. Patent No.	on

WHEREAS, EMC Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having a usual place of business at 176 South Street, Hopkinton, Massachusetts 01748, USA desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey to ASSIGNEE all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

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AND we hereby authorize our attorneys Bainwood Huang & Associates LL0	C to
insert here in parentheses (_) the
application number and filing date of said Application (or foreign counterpart application)	ation)
to facilitate the recording or other official processing of this Assignment.	•

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals as set forth below:

Date:	
	Inventor's Signature
Print full name of first inventor:	Samir D. Saklikar
Residence:	H#32, Saraswathi Nilaya, S G Palya
	C V Raman Nagar
	Bangalore, Karnataka 560093 INDIA
Citizenship:	India
Mailing Address:	Same as above
Venue:	
me the above-named Samir D. Sakli	, 2011, then personally appeared before [kar known to me through satisfactory evidence of tion card; [] driver's license; [] (other)
	to be the person whose name is subscribed to
free act and deed for the purposes th	wledged that he/she executed the same as his/her erein contained.
	Notary Public
	Print Name:
	My Commission expires / /

Date:	
	Inventor's Signature
Print full name of second inventor:	Aditya Kuppa
Residence:	259/A2 7 th Cross, 27 th Main, HSR Layout
Citizanahia	Bangalore, Karnataka 560029 INDIA
Citizenship:	India
Mailing Address:	Same as above
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Venue:	
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the foregoing Assignment and acknow free act and deed for the purposes the	rledged that he/she executed the same as his/her
	Notary Public
	Print Name:
	My Commission expires//

Date:	
	Inventor's Signature
Print full name of third inventor:	Dennis Ray Moreau
Residence:	75 Orchard Avenue, Apt. 3
	Providence, RI 02906
Citizenship:	United States of America
Mailing Address:	Same as above
STATE/COMMONWEALTH OF	
me the above-named Dennis Ray M	, 2011, then personally appeared before loreau known to me through satisfactory evidence ication card; [] driver's license; [] (other) to be the person whose name is subscribed to
the foregoing Assignment and ackno free act and deed for the purposes th	wledged that he/she executed the same as his/her
	Notary Public
	Print Name:
	My Commission expires / /

Date: 6/30/2011	RT/
	Inventor's Signature
Print full name of fourth inventor:	Riaz Zolfonoon
Residence:	152 Annursnac Hill Rd., Concord, MA 01742
Citizenship:	United States of America
Mailing Address:	Same as above
identification [] employee identification to	be the person whose name is subscribed to diged that he/she executed the same as his/her
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•	Notary Public
	Print Name:
	Deanna M. Goodyin
	My Commission expires/// SH130/ff

DEANNA M. GOODWIN
Notary Public
Commonwealth of Massachusetts
My Commission Expires
October 24, 2014