

<b>PATENT ASSIGNMENT COVER SHEET</b>
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EPAS ID: PAT3313569

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
TUSHAR DETHE	04/16/2015
SUNIL YADAV	04/16/2015
SOUMEN ACHARYA	04/16/2015
ANUPAM CHAKRABORTY	04/16/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	EMC CORPORATION
<b>Street Address:</b>	176 SOUTH STREET
<b>City:</b>	HOPKINTON
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	01748
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14674066
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(415)705-6383
<i>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.</i>	
<b>Phone:</b>	4157056377
<b>Email:</b>	rking@dergnoah.com
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<b>Address Line 1:</b>	THREE EMBARCADERO CENTER, SUITE 410
<b>Address Line 4:</b>	SAN FRANCISCO, CALIFORNIA 94111
<b>ATTORNEY DOCKET NUMBER:</b>	965-14-0776
<b>NAME OF SUBMITTER:</b>	TODD A. NOAH
<b>SIGNATURE:</b>	/Todd A. Noah/
<b>DATE SIGNED:</b>	04/16/2015
<b>Total Attachments: 5</b>	
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**ASSIGNMENT**

**WHEREAS**, we, Tushar Dethe, Sunil Yadav, Soumen Acharya and Anupam Chakraborty 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 IDENTIFYING VIRTUAL MACHINES AND ERRORS FOR SNAPSHOTS, the specification of which:

- is being executed on even date herewith and is about to be filed in the United States Patent Office;
- was filed on March 31, 2015 as U.S. Application No. 14/674.066;
- 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 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.

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


Date: 16/4/2015 By: [Signature]  
Inventor's Signature

Print full name of first inventor: Tushar Dethé  
Residence: Flat no. 402, Vibha Enclave, B Narayanpura, Bangalore, 560048, India  
Citizenship: India  
Mailing Address: Same as above

I SHUBHASHISH Malick (name) whose residential address is K R Puram  
was personally present and did see TUSHAR DETHÉ (name of person signing the assignment) who is personally known to me, execute the above assignment.  
[Signature] (signature of first witness)  
Signed at Bangalore (location of witness signature)  
on this 16 day of April 2015 (date of signature)

I Rente Kumar Kamp (name) whose residential address is Bellandur  
was personally present and did see Tushar Dethé (name of person signing the assignment) who is personally known to me, execute the above assignment.  
[Signature] (signature of first witness)  
Signed at Bangalore (location of witness signature)  
on this 16 day of April 2015 (date of signature)

Date: 16/04/2015

By:   
Inventor's Signature

Print full name of second inventor: Sunil Yadav  
Residence: Mahaveer Varna, T-34, Block-A1, Karnataka, Bangalore, 560067, India  
Citizenship: India  
Mailing Address: Same as above

I Shubhashish Mallick (name) whose residential address is K R Puram

was personally present and did see Sunil Yadav (name of person signing the assignment) who is personally known to me, execute the above assignment.

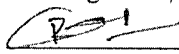
sunh (signature of first witness)

Signed at Bangalore (location of witness signature)

on this 16 day of April 2015 (date of signature)

I Rintu Kumar Kump (name) whose residential address is Bellandur

was personally present and did see Sunil Yadav (name of person signing the assignment) who is personally known to me, execute the above assignment.

 (signature of first witness)

Signed at Bangalore (location of witness signature)

on this 16 day of April 2015 (date of signature)

Date: 16/04/2015

By: Soumen Acharya  
Inventor's Signature

Print full name of third inventor: Soumen Acharya

Residence: Flat-304, G.V. Residency, Venkateswara  
Layout, Mahadevpura, Bangalore, 560049,  
India

Citizenship: India

Mailing Address: Same as above

I Shubhashish Malik (name) whose residential address is  
K R Puram

was personally present and did see Soumen Acharya (name of person signing  
the assignment) who is personally known to me, execute the above assignment.

smk (signature of first witness)

Signed at Bangalore (location of witness signature)

on this 16 day of April 2015 (date of signature)

I Rintu Kumar Kamp (name) whose residential address is  
Bellandur

was personally present and did see Soumen Acharya (name of person signing  
the assignment) who is personally known to me, execute the above assignment.

RP (signature of first witness)

Signed at Bangalore (location of witness signature)

on this 16 day of April 2015 (date of signature)

Date: 16/04/2015

By: Anupam Chakraborty  
Inventor's Signature

Print full name of fourth inventor: Anupam Chakraborty

Residence: Q-801, Purva FountainSquare, Marathahalli,  
Bangalore, 560037, India

Citizenship: India

Mailing Address: Same as above

I Shukhoshin mallick (name) whose residential address is  
K R puram  
was personally present and did see Anupam Chakraborty (name of person signing  
the assignment) who is personally known to me, execute the above assignment.

Smith (signature of first witness)

Signed at Bangalore (location of witness signature)

on this 16 day of April 2015 (date of signature)

I Rintu Kumar Kany (name) whose residential address is  
Bellandur,

was personally present and did see Anupam Chakraborty (name of person signing  
the assignment) who is personally known to me, execute the above assignment.

[Signature] (signature of first witness)

Signed at Bangalore (location of witness signature)

on this 16 day of April 2015 (date of signature)