

<b>PATENT ASSIGNMENT COVER SHEET</b>
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EPAS ID: PAT5630739

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MALAK ALSHAWABKEH	07/18/2019
MOTASEM AWWAD	07/18/2019
SAMER BADRAN	07/18/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	EMC IP HOLDING COMPANY LLC
<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>	16519046
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(978)264-4001
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<b>ATTORNEY DOCKET NUMBER:</b>	115217.01 / 130-202-JCG
<b>NAME OF SUBMITTER:</b>	JOHN C GORECKI, REG NO 38471
<b>SIGNATURE:</b>	/John C Gorecki/
<b>DATE SIGNED:</b>	07/23/2019
<b>Total Attachments: 5</b>	
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## ASSIGNMENT

WHEREAS, we, **Malak Alshawabkeh, Motasem Awwad, and Samer Badran** 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

### **METHOD AND APPARATUS FOR CREATING TESTS FOR EXECUTION IN A STORAGE ENVIRONMENT,**

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 \_\_\_\_ as U.S. Application No. \_\_\_\_\_;
- was patented under U.S. Patent No. \_\_\_\_\_ on \_\_\_\_\_.

WHEREAS, **EMC IP HOLDING COMPANY LLC** (hereinafter "ASSIGNEE"), a Delaware limited liability company 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

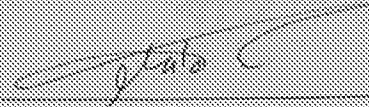
which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional 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;

AND, we do hereby appoint as our attorneys Holmes W. Anderson and John C. Gorecki of Anderson Gorecki LLP, whose full office address is 2 Dundee Park, Suite 301A, Andover, MA 01810, and authorize them to prosecute the patent application(s) and correct errors in this Assignment and to insert any further identification and other information necessary or desirable to make this Assignment suitable for recording in a domestic or foreign Patent Office.


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

Date: 07/18/19


  
Inventor's Signature

Print full name of inventor Malak Alshawabkeh  
Residence Franklin, MA  
Citizenship United States  
Mailing Address 176 South Street  
Hopkinton, MA 01748

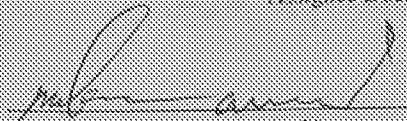
I, Xuanyu Li (name of first witness), whose residential address is  
100 Endage St 618 Malden MA 02148  
was personally present and did see Malak Alshawabkeh (name of person signing the  
assignment), who is personally known to me, execute the above assignment.

 (signature of first witness)  
Signed at 176 South Street Hopkinton, MA (location of witness signature)  
on this day, 07/18, 2019 (date of signature).

I, JAY DUNN (name of second witness), whose residential address is  
185 Ingerside Ave Worcester MA 01604  
was personally present and did see Malak Alshawabkeh (name of person signing the  
assignment), who is personally known to me, execute the above assignment.


 (signature of second witness)  
Signed at 176 South St. Hopkinton MA (location of witness signature)  
on this day, 7-18, 2019 (date of signature).

Date: 7-18-2019


  
Inventor's Signature

Print full name of inventor **Motasem Awwad**  
Residence **Franklin, MA**  
Citizenship **United States**  
Mailing Address **176 South Street  
Hopkinton, MA 01748**

1. Xuanyu Li (name of first witness), whose residential address is  
100 Exchange Street, 618, Malden MA 02148  
was personally present and did see **Motasem Awwad** (name of person signing the assignment),  
who is personally known to me, execute the above assignment.

 (signature of first witness)  
Signed at 176 South Street Hopkinton MA (location of witness signature)  
on this day, 07/18, 2019 (date of signature).

1. Ray Duan (name of second witness), whose residential address is  
185 The Reside Ave Worcester MA 01604  
was personally present and did see **Motasem Awwad** (name of person signing the assignment),  
who is personally known to me, execute the above assignment.

 (signature of second witness)  
Signed at 176 South St. Hopkinton MA (location of witness signature)  
on this day, 7-18-, 2019 (date of signature).

Date: 07/18/2019



Inventor's Signature

Print full name of inventor

Samer Badran

Residence

Melrose, MA

Citizenship

United States


Mailing Address

176 South Street

Hopkinton, MA 01748

I, Xuanqu Li (name of first witness), whose residential address is  
100 Exchange St. 6th Malden MA 02148

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

 (signature of first witness)

Signed at 176 South Street, Hopkinton, MA (location of witness signature)

on this day, 07/18, 2019 (date of signature).

I, TAT DUONG (name of second witness), whose residential address is

185 Inglewood Ave Worcester MA 01604

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

 (signature of second witness)

Signed at 176 South St Hopkinton MA (location of witness signature)

on this day, 7-18, 2019 (date of signature).