502265075 03/13/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Scott E. JOYCE	03/12/2013
Norman M. MILES	03/12/2013
Donald E. LABAJ	03/12/2013
Timothy J. COX	03/12/2013

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:	13798545

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 508-898-8601

Email: docketing@westboro-ip.com

Correspondent Name: MUIRHEAD AND SATURNELLI, LLC
Address Line 1: 200 FRIBERG PARKWAY, SUITE 1001
Address Line 4: WESTBOROUGH, MASSACHUSETTS 01581

ATTORNEY DOCKET NUMBER:	EMS-503US; EMC-12-1210
NAME OF SUBMITTER:	Anne E. Saturnelli

Total Attachments: 5

source=EMS-503US, Executed Assignment#page1.tif source=EMS-503US, Executed Assignment#page2.tif source=EMS-503US, Executed Assignment#page3.tif source=EMS-503US, Executed Assignment#page4.tif source=EMS-503US, Executed Assignment#page5.tif

PATENT REEL: 029981 FRAME: 0236 \$40.00 13798

ASSIGNMENT

WHEREAS, we, Scott E. JOYCE, Norman M. MILES, Donald E. LABAJ and Timothy J. COX 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 MIXED MODE SIMULATION, the specification of which:

[X]	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 Noon

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;

PATENT

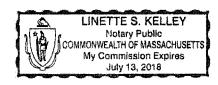
REEL: 029981 FRAME: 0237

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 attorneys of Muirhead and Saturnelli, LLC to insert here in parenthesis (13/768,545 fike 03-13-13 the application number and filing date of said Application (or foreign counterpart application) 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: Inventor's Signature Scott E. JOYCE Print full name of first inventor: 3 Angela Drive Residence: Foxboro, MA 02035 U.S.A. Citizenship: Same Mailing Address: STATE OF MASSACHUSETTS

COUNTY OF Middle sex On this 12 day of March, 2013, then personally appeared before me the above-named Scott E. JOYCE known to me through satisfactory evidence of identification [] employee identification card; [X] driver's license; [_] (other) be the person whose name is subscribed to the foregoing Assignment and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained. Notary Explic

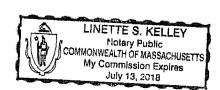
Print Name: Linette S. Kelley

My Commission expires: 07/13/2018



Date: 3/12/13	
Print full name of second inventor: Residence: Citizenship: Mailing Address:	Inventor's Signature Norman M. MILES 10 Donovan Drive Bedford, MA 01730 U.S.A. Same
STATE OF MASSACHUSETTS COUNTY OF <u>Middle sex</u>	·
Norman M. MILES known to me through sa	e foregoing Assignment and acknowledged that
	Print Name: Linette S. Kelley My Commission expires: 07/13/2018
	LINETTE S. KELLEY Notary Public COMMONWEALTH OF MASSACHUSETTS My Commission Expires July 13, 2018

Date: 03/12/2013	Donalds 25
	Inventor's Signature
Print full name of third inventor: Residence:	Donald E. LABAJ 29 Otis Street Northborough, MA 01532
Citizenship: Mailing Address:	U.S.A. Same
STATE OF MASSACHUSETTS COUNTY OF Middle Sex	
Donald E. LABAJ known to me through sati identification card; [] driver's license; []	foregoing Assignment and acknowledged that
	Swite S. Kelley
	Notary Public T
	Print Name: Linette S. Kelley My Commission expires: 07/13/2018
	111) Commission outlies.



Date: $3-/2-13$	Jamollas Jamentors Signature
Print full name of fourth inventor: Residence: Citizenship: Mailing Address:	Timothy J. COX 20 King Philip Path Mendon, MA 01756 U.S.A. Same
STATE OF MASSACHUSETTS COUNTY OFMiddleses	- .
Timothy J. COX known to me through satis identification card: [] driver's license: []	e foregoing Assignment and acknowledged that
	Notary Public Print Name: Linette S. Kelley My Commission expires: 07/13/2018
	LINETTE S, KELLEY Notary Public COMMONWEALTH OF MASSACHUSETTS My Commission Expires July 13, 2018