

## PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT								
NATURE OF CONVEYANCE:	ASSIGNMENT								
CONVEYING PARTY DATA									
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Frederick Douglis</td> <td>04/30/2012</td> </tr> <tr> <td>Windsor W. Hsu</td> <td>04/27/2012</td> </tr> <tr> <td>Hangwei Qian</td> <td>04/27/2012</td> </tr> </tbody> </table>		Name	Execution Date	Frederick Douglis	04/30/2012	Windsor W. Hsu	04/27/2012	Hangwei Qian	04/27/2012
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Frederick Douglis	04/30/2012								
Windsor W. Hsu	04/27/2012								
Hangwei Qian	04/27/2012								
RECEIVING PARTY DATA									
Name:	EMC Corporation								
Street Address:	176 South Street								
City:	Hopkinton								
State/Country:	MASSACHUSETTS								
Postal Code:	01748								
PROPERTY NUMBERS Total: 1									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13460722</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13460722				
Property Type	Number								
Application Number:	13460722								
CORRESPONDENCE DATA									
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Phone:	408-720-8300								
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Correspondent Name:	Blakely Sokoloff Taylor & Zafman LLP								
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Address Line 4:	Sunnyvale, CALIFORNIA 94085								
ATTORNEY DOCKET NUMBER:	6368P025F3								
NAME OF SUBMITTER:	Kevin G. Shao								
Total Attachments: 4 source=P025F3 Assignment signed#page1.tif source=P025F3 Assignment signed#page2.tif source=P025F3 Assignment signed#page3.tif source=P025F3 Assignment signed#page4.tif									

CH \$40.00 13460722

**ASSIGNMENT OF PATENT APPLICATION**

Attorney Docket No.: 6368P025F3

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we, the undersigned,

**Frederick Dougils, Windsor W. Hsu and Hangwei Qian**

hereby sell, assign, and transfer to

**EMC Corporation**

a corporation of California, having a principal place of business at 176 south Street, Hopkinton, Massachusetts, 01748, USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all inventions or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which for the non-provisional application may have a declaration executed by the undersigned prior hereto or concurrently herewith and which application (provisional or non-provisional) is entitled

**SYSTEM AND METHOD FOR CACHE REPLACEMENT USING BLOOM FILTER LOOKAHEAD APPROACH**

said patent application also identified as follows (when known):

[I/we hereby authorize an attorney or agent for said Assignee to insert below the application number and filing date of said patent application when known.]

United States Patent Application Number \_\_\_\_\_ filed \_\_\_\_\_,

and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents

and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

**Each Inventor: Please Sign and Date Below:**

April 30, 2012  
Date

  
Signature

Frederick Douglass  
Printed/Typed Name

\_\_\_\_\_, 20\_\_\_\_  
Date

\_\_\_\_\_  
Signature

Windsor W. Hsu  
Printed/Typed Name

\_\_\_\_\_, 20\_\_\_\_  
Date

\_\_\_\_\_  
Signature

Hanwei Qian  
Printed/Typed Name

Assignment Document Return Address:  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP  
1279 Oakmead Parkway  
Sunnyvale, CA 94085-4040  
(408) 720-8300

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\_\_\_\_\_, 20\_\_\_\_  
Date Signature

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Printed/Typed Name

\_\_\_\_\_, 20\_\_\_\_  
Date Signature

Windsor W. Hsu  
Printed/Typed Name

04/27, 2012  
Date Signature

Hangwei Qian  
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**Each Inventor: Please Sign and Date Below:**

\_\_\_\_\_, 20\_\_\_\_  
Date Signature

Frederick Douglis  
Printed/Typed Name

4/27, 2012  
Date Signature

Windsor W. Hsu  
Printed/Typed Name

\_\_\_\_\_, 20\_\_\_\_  
Date Signature

Hangwei Qian  
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