

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>Marten VAN DIJK</td> <td>06/10/2012</td> </tr> <tr> <td>Kevin D. BOWERS</td> <td>05/15/2012</td> </tr> <tr> <td>Samuel CURRY</td> <td>04/30/2012</td> </tr> <tr> <td>Riaz ZOLFONOON</td> <td>05/01/2012</td> </tr> <tr> <td>Sean P. DOYLE</td> <td>06/12/2012</td> </tr> <tr> <td>Nikolaos TRIANDOPOULOS</td> <td>05/31/2012</td> </tr> </tbody> </table>		Name	Execution Date	Marten VAN DIJK	06/10/2012	Kevin D. BOWERS	05/15/2012	Samuel CURRY	04/30/2012	Riaz ZOLFONOON	05/01/2012	Sean P. DOYLE	06/12/2012	Nikolaos TRIANDOPOULOS	05/31/2012
Name	Execution Date														
Marten VAN DIJK	06/10/2012														
Kevin D. BOWERS	05/15/2012														
Samuel CURRY	04/30/2012														
Riaz ZOLFONOON	05/01/2012														
Sean P. DOYLE	06/12/2012														
Nikolaos TRIANDOPOULOS	05/31/2012														
RECEIVING PARTY DATA															
<table border="1"> <tr> <td>Name:</td> <td>EMC Corporation</td> </tr> <tr> <td>Street Address:</td> <td>176 South Street</td> </tr> <tr> <td>City:</td> <td>Hopkinton</td> </tr> <tr> <td>State/Country:</td> <td>MASSACHUSETTS</td> </tr> <tr> <td>Postal Code:</td> <td>01748</td> </tr> </table>		Name:	EMC Corporation	Street Address:	176 South Street	City:	Hopkinton	State/Country:	MASSACHUSETTS	Postal Code:	01748				
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>13435848</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13435848										
Property Type	Number														
Application Number:	13435848														
CORRESPONDENCE DATA															
Fax Number:	(508)366-4688														
Phone:	5086162900														
Email:	docket@bainwoodhuang.com														
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>															
Correspondent Name:	Bruce D. Rubenstein, Esq.														
Address Line 1:	Bainwood, Huang & Associates, LLC														
Address Line 2:	2 Connector Road														
Address Line 4:	Westborough, MASSACHUSETTS 01581														
ATTORNEY DOCKET NUMBER:	1048-124														

CH \$40.00 13435848

NAME OF SUBMITTER:

Bruce D. Rubenstein, Esq.

Total Attachments: 40

source=1048-124-Assignment#page1.tif
source=1048-124-Assignment#page2.tif
source=1048-124-Assignment#page3.tif
source=1048-124-Assignment#page4.tif
source=1048-124-Assignment#page5.tif
source=1048-124-Assignment#page6.tif
source=1048-124-Assignment#page7.tif
source=1048-124-Assignment#page8.tif
source=1048-124-Assignment#page9.tif
source=1048-124-Assignment#page10.tif
source=1048-124-Assignment#page11.tif
source=1048-124-Assignment#page12.tif
source=1048-124-Assignment#page13.tif
source=1048-124-Assignment#page14.tif
source=1048-124-Assignment#page15.tif
source=1048-124-Assignment#page16.tif
source=1048-124-Assignment#page17.tif
source=1048-124-Assignment#page18.tif
source=1048-124-Assignment#page19.tif
source=1048-124-Assignment#page20.tif
source=1048-124-Assignment#page21.tif
source=1048-124-Assignment#page22.tif
source=1048-124-Assignment#page23.tif
source=1048-124-Assignment#page24.tif
source=1048-124-Assignment#page25.tif
source=1048-124-Assignment#page26.tif
source=1048-124-Assignment#page27.tif
source=1048-124-Assignment#page28.tif
source=1048-124-Assignment#page29.tif
source=1048-124-Assignment#page30.tif
source=1048-124-Assignment#page31.tif
source=1048-124-Assignment#page32.tif
source=1048-124-Assignment#page33.tif
source=1048-124-Assignment#page34.tif
source=1048-124-Assignment#page35.tif
source=1048-124-Assignment#page36.tif
source=1048-124-Assignment#page37.tif
source=1048-124-Assignment#page38.tif
source=1048-124-Assignment#page39.tif
source=1048-124-Assignment#page40.tif

ASSIGNMENT

WHEREAS, we, Marten van Dijk, Kevin D. Bowers, Samuel Curry, Sean P. Doyle, Nikolaos Triandopoulos 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 SOFT TOKEN COPIES** 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 30, 2012 as U.S. Application No. 13/435,848;
- 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;

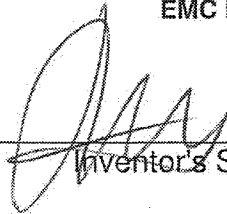
AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, 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;

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 LLC to insert here in parentheses (_____) 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:

Date: June 10, 2012

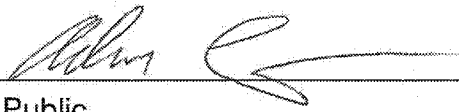


Inventor's Signature

Print full name of first inventor: Marten van Dijk
Residence: 19 Trull Street, #2
Somerville, MA 02145
Citizenship: NL
Mailing Address: Same as above

STATE/Commonwealth of Massachusetts
COUNTY OF Middlesex

On this 10 day of June, 2012, then personally appeared before me the above-named **Marten van Dijk** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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 Public

Print Name: Adam Luther

My Commission expires 12/14/12



Adam James Luther
NOTARY PUBLIC
Commonwealth of Massachusetts
My Commission Expires Dec 14, 2012

Date: _____

Inventor's Signature

Print full name of second inventor: Kevin D. Bowers
Residence: 249 Tremont Street
Melrose, MA 02176
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Kevin D. Bowers** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of third inventor: Samuel Curry
Residence: 810 Salem Street
Andover, MA 01845
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Samuel Curry** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of fourth inventor: Sean P. Doyle
Residence: 22310 91st Ave W.
Edmonds, WA 98026
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Sean P. Doyle** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of fifth inventor: Nikolaos Triandopoulos
Residence: 73 Bartlett Avenue
Arlington, MA 02476
Citizenship: GR
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Nikolaos Triandopoulos** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of sixth inventor: Riaz Zolfonoon
Residence: 9 Langelier Lane
Marlborough, MA 01752
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Riaz Zolfonoon** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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 Public

Print Name: _____

My Commission expires ___ / ___ / ___

ASSIGNMENT

WHEREAS, we, Marten van Dijk, Kevin D. Bowers, Samuel Curry, Sean P. Doyle, Nikolaos Triandopoulos 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 SOFT TOKEN COPIES** 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 30, 2012 as U.S. Application No. 13/435,848;

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;

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 LLC to insert here in parentheses (_____) 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:

Date: _____

Inventor's Signature

Print full name of first inventor:

Marten van Dijk

Residence:

19 Trull Street, #2
Somerville, MA 02145

Citizenship:

NL

Mailing Address:

Same as above

STATE/COMMONWEALTH OF _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Marten van Dijk** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: 5/15/2012

Kevin D. Bowers
Inventor's Signature

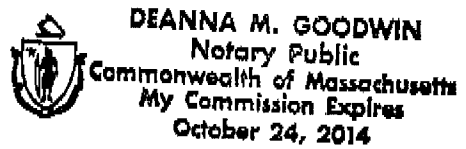
Print full name of second inventor: Kevin D. Bowers
Residence: 249 Tremont Street
Melrose, MA 02176
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of Massachusetts
COUNTY OF Middlesex

On this 15 day of May, 2012, then personally appeared before me the above-named **Kevin D. Bowers** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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.

Deanna M. Goodwin
Notary Public

Print Name: Deanna M. Goodwin
My Commission expires 10/24/2014



Date: _____

Inventor's Signature

Print full name of third inventor: Samuel Curry
Residence: 810 Salem Street
Andover, MA 01845
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Samuel Curry** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of fourth inventor: Sean P. Doyle
Residence: 22310 91st Ave W.
Edmonds, WA 98026
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth OF _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Sean P. Doyle** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of fifth inventor: Nikolaos Triandopoulos
Residence: 73 Bartlett Avenue
Arlington, MA 02476
Citizenship: GR
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Nikolaos Triandopoulos** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of sixth inventor: Riaz Zolfonoon
Residence: 9 Langelier Lane
Marlborough, MA 01752
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Riaz Zolfonoon** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

ASSIGNMENT

WHEREAS, we, Marten van Dijk, Kevin D. Bowers, Samuel Curry, Sean P. Doyle, Nikolaos Triandopoulos 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 SOFT TOKEN COPIES** 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 30, 2012 as U.S. Application No. 13/435,848;
- 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;

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 LLC to insert here in parentheses (_____) 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:

Date: _____

Inventor's Signature

Print full name of first inventor: Marten van Dijk
Residence: 19 Trull Street, #2
Somerville, MA 02145
Citizenship: NL
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Marten van Dijk** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of second inventor: Kevin D. Bowers
Residence: 249 Tremont Street
Melrose, MA 02176
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

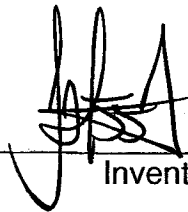
On this _____ day of _____, 2012, then personally appeared before me the above-named **Kevin D. Bowers** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Notary Public

Print Name:

My Commission expires ___ / ___ / ___

Date: 4/30/2012

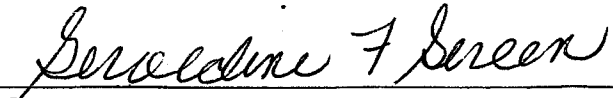


Inventor's Signature

Print full name of third inventor: Samuel Curry
Residence: 810 Salem Street
Andover, MA 01845
Citizenship: US
Mailing Address: Same as above

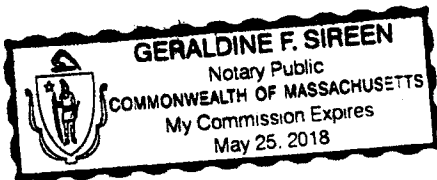
STATE/Commonwealth of Massachusetts
COUNTY OF Middlesex

On this 30th day of April, 2012, then personally appeared before me the above-named **Samuel Curry** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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 Public

Print Name: GERALDINE F. SIREEN
My Commission expires 5/25/2018



Date: _____

Inventor's Signature

Print full name of fourth inventor: Sean P. Doyle
Residence: 22310 91st Ave W.
Edmonds, WA 98026
Citizenship: US
Mailing Address: Same as above

STATE/COMMONWEALTH OF _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Sean P. Doyle** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of fifth inventor: Nikolaos Triandopoulos
Residence: 73 Bartlett Avenue
Arlington, MA 02476
Citizenship: GR
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Nikolaos Triandopoulos** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: 5/1/12

R. Zolfonoon
Inventor's Signature

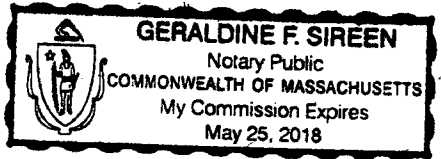
Print full name of sixth inventor: Riaz Zolfonoon
Residence: 9 Langelier Lane
Marlborough, MA 01752
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of Massachusetts
COUNTY OF Nichols

On this 1st day of May, 2012, then personally appeared before me the above-named **Riaz Zolfonoon** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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.

Geraldine F Sireen
Notary Public

Print Name: GERALDINE F SIREEN
My Commission expires 5/25/2018



ASSIGNMENT

WHEREAS, we, Marten van Dijk, Kevin D. Bowers, Samuel Curry, Sean P. Doyle, Nikolaos Triandopoulos 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 SOFT TOKEN COPIES** 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 30, 2012 as U.S. Application No. 13/435,848;
- 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;

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 LLC to insert here in parentheses (_____) 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:

Date: _____

Inventor's Signature

Print full name of first inventor: Marten van Dijk
Residence: 19 Trull Street, #2
Somerville, MA 02145
Citizenship: NL
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Marten van Dijk** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of second inventor: Kevin D. Bowers
Residence: 249 Tremont Street
Melrose, MA 02176
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Kevin D. Bowers** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of third inventor: Samuel Curry
Residence: 810 Salem Street
Andover, MA 01845
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Samuel Curry** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name: _____

My Commission expires ___ / ___ / ___

Date: 6/12/12

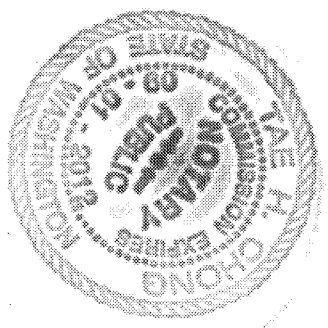
Sean P. Doyle
Inventor's Signature

Print full name of fourth inventor: Sean P. Doyle
Residence: 22310 91st Ave W.
Edmonds, WA 98026
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth OF Washington
COUNTY OF Snohomish

On this 12th day of June, 2012, then personally appeared before me the above-named **Sean P. Doyle** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) U.S. passport to 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.

[Signature]
Notary Public
Print Name: TAZ PAI CHONG
My Commission expires 9/11/2012



Date: _____

Inventor's Signature

Print full name of fifth inventor: Nikolaos Triandopoulos
Residence: 73 Bartlett Avenue
Arlington, MA 02476
Citizenship: GR
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Nikolaos Triandopoulos** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of sixth inventor: Riaz Zolfonoon
Residence: 9 Langelier Lane
Marlborough, MA 01752
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Riaz Zolfonoon** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

ASSIGNMENT

WHEREAS, we, Marten van Dijk, Kevin D. Bowers, Samuel Curry, Sean P. Doyle, Nikolaos Triandopoulos 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 SOFT TOKEN COPIES** 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 30, 2012 as U.S. Application No. 13/435,848;
- 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;

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 LLC to insert here in parentheses (_____) 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:

Date: _____

Inventor's Signature

Print full name of first inventor: Marten van Dijk
Residence: 19 Trull Street, #2
Somerville, MA 02145
Citizenship: NL
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Marten van Dijk** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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 Public

Print Name: _____

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of second inventor: Kevin D. Bowers
Residence: 249 Tremont Street
Melrose, MA 02176
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Kevin D. Bowers** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of third inventor: Samuel Curry
Residence: 810 Salem Street
Andover, MA 01845
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Samuel Curry** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: _____

Inventor's Signature

Print full name of fourth inventor: Sean P. Doyle
Residence: 22310 91st Ave W.
Edmonds, WA 98026
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Sean P. Doyle** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___

Date: May 31, 2012

[Signature]
Inventor's Signature

Print full name of fifth inventor: Nikolaos Triandopoulos
Residence: 73 Bartlett Avenue
Arlington, MA 02476
Citizenship: GR
Mailing Address: Same as above

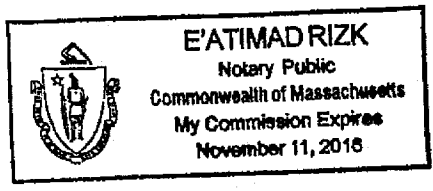
STATE/Commonwealth of Massachusetts
COUNTY OF Middlesex

On this 31st day of May, 2012, then personally appeared before me the above-named **Nikolaos Triandopoulos** known to me through satisfactory evidence of identification [] employee identification card; [] driver's license; [] (other) _____ to 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.

[Signature]
Notary Public

Print Name: E'atimad Rizk

My Commission expires 09/11/2016



Date: _____

Inventor's Signature

Print full name of sixth inventor: Riaz Zolfonoon
Residence: 9 Langelier Lane
Marlborough, MA 01752
Citizenship: US
Mailing Address: Same as above

STATE/Commonwealth of _____
COUNTY OF _____

On this _____ day of _____, 2012, then personally appeared before me the above-named **Riaz Zolfonoon** known to me through satisfactory evidence of identification employee identification card; driver's license; (other) _____ to 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 Public

Print Name:

My Commission expires ___ / ___ / ___