

# PATENT ASSIGNMENT

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT																						
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT																						
<b>CONVEYING PARTY DATA</b>																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr><td>JAMES A. MULLINS</td><td>09/29/2010</td></tr> <tr><td>ALAN T. COONEY</td><td>09/29/2010</td></tr> <tr><td>BRENDAN T. BUTLER</td><td>09/29/2010</td></tr> <tr><td>GER V. HALLISSEY</td><td>09/29/2010</td></tr> <tr><td>DEREK A. BARRETT</td><td>09/29/2010</td></tr> <tr><td>JOHN CARMODY</td><td>09/29/2010</td></tr> <tr><td>PAUL O'KEEFFE</td><td>09/29/2010</td></tr> <tr><td>PAT J. HEALY</td><td>09/29/2010</td></tr> <tr><td>LISA O'MAHONY</td><td>09/29/2010</td></tr> <tr><td>PHILIP SHEEHAN</td><td>09/29/2010</td></tr> </tbody> </table>		Name	Execution Date	JAMES A. MULLINS	09/29/2010	ALAN T. COONEY	09/29/2010	BRENDAN T. BUTLER	09/29/2010	GER V. HALLISSEY	09/29/2010	DEREK A. BARRETT	09/29/2010	JOHN CARMODY	09/29/2010	PAUL O'KEEFFE	09/29/2010	PAT J. HEALY	09/29/2010	LISA O'MAHONY	09/29/2010	PHILIP SHEEHAN	09/29/2010
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<b>PROPERTY NUMBERS Total: 1</b>																							
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<b>CORRESPONDENCE DATA</b>																							
<p>Fax Number: (781)515-5450</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 508-435-1000</p> <p>Email: KRISTEN.CAIZZI@RSA.COM</p> <p>Correspondent Name: EMC CORPORATION OFFICE OF THE GENERAL CO</p> <p>Address Line 1: 176 SOUTH STREET</p>																							

CH \$40.00 12894660

**501306997**

**PATENT**  
**REEL: 025071 FRAME: 0020**

Address Line 4: HOPKINTON, MASSACHUSETTS 01748

ATTORNEY DOCKET NUMBER:

EMC-09-235

NAME OF SUBMITTER:

Joseph D'Angelo

**Total Attachments: 12**

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## ASSIGNMENT

**WHEREAS**, we, **JAMES A. MULLINS, ALAN T. COONEY, BRENDAN T. BUTLER, GER V. HALLISSEY, DEREK A. BARRETT, JOHN CARMODY, PAUL O'KEEFFE, PAT J. HEALY, LISA O'MAHONY, and PHILIP SHEEHAN** 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 **DATA CENTER ENERGY MANAGER** (Application), 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 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;

**AND**, we hereby authorize our attorneys, EMC Corporation, to insert here in parenthesis (\_\_\_\_\_) 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: 9/29/2010

Jim Mullins  
Inventor's Signature

Print full name of first inventor:

JAMES A. MULLINS

Residence:

COIS COILTE, GURTEEN INNISCARRA,  
COUNTY CORK, IRELAND

Citizenship:

IRELAND

Mailing Address:

SAME AS ABOVE

I Nanci A. Shaffer (name) whose full post office address is  
176 South St. Hopkinton, MA 01748  
(residential address) was personally present and did see JAMES A. MULLINS (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

Nanci A. Shaffer (signature of first witness)

Signed at 176 South St. Hopkinton, MA 01748 (location of witness signature)

on this day September 29 of 2010. (date of signature)

I DEEPIKA BHAYANA (name) whose full post office address is  
176 SOUTH STREET, HOPKINTON, MA 01748  
(residential address) was personally present and did see JAMES A. MULLINS (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

Deepika (signature of second witness)

Signed at 176 South St. Hopkinton, MA 01748 (location of witness signature)

on this day September 29 of 2010. (date of signature)

Date: 29-Sep-10

  
Inventor's Signature

Print full name of second inventor:

ALAN T. COONEY

Residence:

32 CRANFORD PINES, BALLINCOLLIG,  
COUNTY CORK, IRELAND

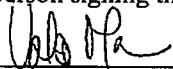
Citizenship:

IRELAND

Mailing Address:

SAME AS ABOVE

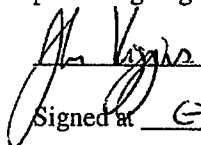
I VALERIA MANNEN (name) whose full post office address is  
141 Bloomfield, Limerick  
(residential address) was personally present and did see ALAN COONEY (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

 (signature of first witness)

Signed at EMC, Cork (location of witness signature)

on this day 29<sup>th</sup> Sept of 20 10. (date of signature)

I JOHN KERNAN (name) whose full post office address is  
12 WETWAT GRANGE MARINE, DUNNY, CO. CORK  
(residential address) was personally present and did see ALAN COONEY (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

 (signature of second witness)

Signed at EMC, Cork (location of witness signature)

on this day 29<sup>th</sup> / Sept of 20 10. (date of signature)

Date: 29 Sept. 2010

Brendan Butler  
Inventor's Signature

Print full name of second inventor:

**BRENDAN T. BUTLER**

Residence:

**OAKHURST, DUNMORE LAWN,  
BOREENMANNA ROAD, COUNTRY  
CORK, IRELAND**

Citizenship:

**IRELAND**

Mailing Address:

**SAME AS ABOVE**

I VALERIA MANNIC (name) whose full post office address is  
147 BLOOMFIELD, LIMERICK, ~~IRE~~  
(residential address) was personally present and did see BRENDAN BUTLER (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

Valeria Mannic (signature of first witness)

Signed at EMC, CORK (location of witness signature)

on this day 29th/SEP7 of 2010. (date of signature)

I JOAN KIRKIN (name) whose full post office address is  
12 WESTWAY, GRANGE MANOR, OVERY, CO. CORK  
(residential address) was personally present and did see BRENDAN BUTLER (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

Joan Kirkin (signature of second witness)

Signed at EMC, CORK (location of witness signature)

on this day 29th/SEP7 of 2010. (date of signature)

Date: 29/09/10

Ger V. Hallissey  
Inventor's Signature

Print full name of second inventor:

**GER V. HALLISSEY**

Residence:

**92 OLD COURT, GREENFIELDS,  
BALLINCOLLIG, COUNTY CORK,  
IRELAND**

Citizenship:

**IRELAND**

Mailing Address:

**SAME AS ABOVE**

I VALERIA. MANNEN (name) whose full post office address is  
147 BLOOMFIELD, LIMERICK  
(residential address) was personally present and did see GER HALLISSEY (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

John P. (signature of first witness)

Signed at EMC, CORK (location of witness signature)

on this day 29th/SEPT of 2010. (date of signature)

I \_\_\_\_\_ (name) whose full post office address is  
12 WESTWAY, GRANGE MANOR, DUBLIN, CO. DUBLIN  
(residential address) was personally present and did see GER HALLISSEY (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

John K. (signature of second witness)

Signed at EMC, CORK (location of witness signature)

on this day 29th/SEPT of 2010. (date of signature)



Date: 29/09/2010

Derek Barrett  
Inventor's Signature

Print full name of second inventor:

**DEREK A. BARRETT**

Residence:

**4 CLUAIN AN OIR, BELGOOLY,  
CARRIGALINE, COUNTYCORK,  
IRELAND**

Citizenship:

**IRELAND**

Mailing Address:

**SAME AS ABOVE**

I JACARIA MAYNARD (name) whose full post office address is  
147 BLOOMFIELD LIMERICK  
(residential address) was personally present and did see DEREK BARRETT (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

John R.

(signature of first witness)

Signed at EMC, CORK (location of witness signature)

on this day 29th/SEP of 2010. (date of signature)

I JOHN KEOGH (name) whose full post office address is  
12 WESTWAY, GRANGE MANOR, DUBLIN 10, CORK  
(residential address) was personally present and did see DEREK BARRETT (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

John Keogh

(signature of second witness)

Signed at EMC, CORK (location of witness signature)

on this day 29th/SEP of 2010. (date of signature)

Date: 29-9-10



Inventor's Signature

Print full name of second inventor:

**JOHN CARMODY**

Residence:

**48 DEWBERRY MOUNT OVAL VILLAGE,  
ROCHESTOWN, COUNTY CORK,  
IRELAND**

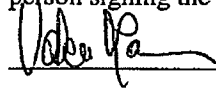
Citizenship:

**IRELAND**

Mailing Address:

**SAME AS ABOVE**

I MARIA MANN (name) whose full post office address is  
117 BLOOMFIELD, LIMERICK  
(residential address) was personally present and did see John Carmody (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

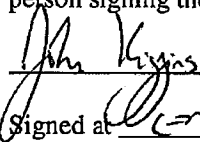


(signature of first witness)

Signed at EMC, COCK (location of witness signature)

on this day 29<sup>th</sup>/SEP/- of 2010. (date of signature)

I JOHN KIGGINS (name) whose full post office address is  
12 WESTWAY GRANGE MANOR OVENS CORK  
(residential address) was personally present and did see JOHN CARMODY (name of  
person signing the assignment) who is personally known to me, execute the above assignment.



(signature of second witness)

Signed at EMC, COCK (location of witness signature)

on this day 29<sup>th</sup>/SEP of 2010. (date of signature)

Date: 29<sup>th</sup>/SEPT/2010

Paul O'Keeffe

Inventor's Signature

Print full name of second inventor:

PAUL O'KEEFFE

Residence:

67 SPRINGFORT, MONTENOTTE, CORK,  
IRELAND

Citizenship:

IRELAND

Mailing Address:

SAME AS ABOVE

I VALERIA MANU. (name) whose full post office address is  
147 BLOOMFIELD, LIMERICK  
(residential address) was personally present and did see PAUL O'KEEFFE (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

Valeria Manu.

(signature of first witness)

Signed at EMC, CORK (location of witness signature)

on this day 29<sup>th</sup>/SEPT of 2010. (date of signature)

I JOHN KIGGINS (name) whose full post office address is  
12 WESTWAY, CALANGE MANOR, QUENY CO. CORK  
(residential address) was personally present and did see PAUL O'KEEFFE (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

John Kiggins.

(signature of second witness)

Signed at EMC, CORK (location of witness signature)

on this day 29<sup>th</sup>/SEPT of 2010. (date of signature)

Date: 29/09/10

  
Inventor's Signature

Print full name of second inventor:

**PAT J. HEALY**

Residence:

**4 IVY CRESCENT RIVERWAY, SOUTH  
DOUGLAS ROAD, COUNTY CORK,  
IRELAND**

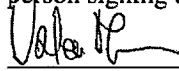
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**IRELAND**

Mailing Address:

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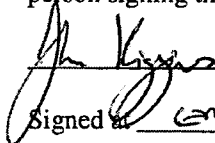
I VALERIA MANNU (name) whose full post office address is  
147 BLOOM FIELD, LIMERICK  
(residential address) was personally present and did see PAT HEALY (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

 (signature of first witness)

Signed at EMC, CORK (location of witness signature)

on this day 29<sup>th</sup>/SEPT of 2010. (date of signature)

I JOHN KLEGGINS (name) whose full post office address is  
12 WESTWAY, GRANGE MANOR, QUENY CO. CORK  
(residential address) was personally present and did see PAT HEALY (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

 (signature of second witness)

Signed at EMC, CORK (location of witness signature)

on this day 29<sup>th</sup>/SEPT of 2010. (date of signature)

Date: 29/9/2010

Lisa O'Mahony  
Inventor's Signature

Print full name of second inventor:

**LISA O'MAHONY**

Residence:

**39 COPPER VALLEY HEIGHTS, GLANMIRE, LCM  
CORK, IRELAND**

Citizenship:

**IRELAND**

Mailing Address:

**SAME AS ABOVE**

I VALERIA MANN (name) whose full post office address is  
147 BLOOMFIELD, LIMERICK  
(residential address) was personally present and did see LISA O'MAHONY (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

Valeria Mann (signature of first witness)

Signed at EMC, CORK (location of witness signature)

on this day 29<sup>th</sup>/SEPT of 2010. (date of signature)

I JOHN KIGINS (name) whose full post office address is  
17 WESTWAX, GRANGE MANOR, DUBLIN, CO. DUBLIN  
(residential address) was personally present and did see LISA O'MAHONY (name of  
person signing the assignment) who is personally known to me, execute the above assignment.

John Kigin (signature of second witness)

Signed at EMC, DUBLIN, CORK (location of witness signature)

on this day 29<sup>th</sup>/SEPT of 2010. (date of signature)

Date: 29/9/2010

  
Inventor's Signature

Print full name of second inventor:

PHILIP SHEEHAN

Residence:

115 O'DOLLOUGH,  
BAGENINCH, P.S.

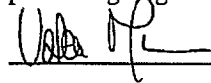
Citizenship:

BALLINACOLLE, CO. CK,  
IRELAND

Mailing Address:

SAME AS ABOVE

I VALERIA MANN (name) whose full post office address is  
147 BLOOMFIELD, LIMERICK  
(residential address) was personally present and did see PHILIP SHEEHAN (name of  
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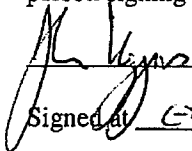


(signature of first witness)

Signed at EMC OVEN, CO. CORK (location of witness signature)

on this day 29<sup>th</sup> SEPT of 2010. (date of signature)

I JOHN KIGGINS (name) whose full post office address is  
12 WESTWAY, GLANCE MANSIE, OVEN, CO. CORK  
(residential address) was personally present and did see PHILIP SHEEHAN (name of  
person signing the assignment) who is personally known to me, execute the above assignment.



(signature of second witness)

Signed at EMC, OVEN, CO. CORK (location of witness signature)

on this day 29<sup>th</sup> SEPT of 2010. (date of signature)