# 503313067 05/19/2015

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3359685

| SUBMISSION TYPE:            |           | NEW ASSIGNMENT |                |
|-----------------------------|-----------|----------------|----------------|
| NATURE OF CONVEYA           | NCE:      | ASSIGNMENT     |                |
| CONVEYING PARTY             | ΔΤΑ       |                |                |
|                             |           | Name           | Execution Date |
| ANGELO E. M. CIARLINI       |           | 03/30/2015     |                |
| FABIO A. M. PORTO           |           | 03/30/2015     |                |
| AMIR H. K. MOGHADAM         |           | 03/30/2015     |                |
| JONAS F. DIAS               |           | 03/30/2015     |                |
| PAULO DE FIGUEIREI          | DO PIRES  |                | 03/30/2015     |
| FABIO A. PEROSI             |           |                | 04/06/2015     |
| ALEX L. BORDIGNON           |           | 03/30/2015     |                |
| BRUNO CARLOS DA CUNHA COSTA |           | 03/30/2015     |                |
| WAGNER DOS SANTOS VIEIRA    |           | 03/30/2015     |                |
| RECEIVING PARTY D           | ΑΤΑ       |                |                |
| Name:                       | EMC Cor   | poration       |                |
| Street Address:             | 176 Sout  | h Street       |                |
| City:                       | Hopkintor | n              |                |
| State/Country:              | MASSAC    | HUSETTS        |                |
| Postal Code:                | 01748     |                |                |

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 14672516 |

### CORRESPONDENCE DATA

Fax Number:

| Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent |
|---------------------------------------------------------------------------------------------------|
| using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.            |

| Address Line 4:     | WESTPORT, CONNECTICUT 06880    |
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| Address Line 2:     | RYAN, MASON & LEWIS, LLP       |
| Address Line 1:     | 1175 POST ROAD EAST, 2ND FLOOR |
| Correspondent Name: | KEVIN M. MASON                 |
| Email:              | bab@rml-law.com                |
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| ATTORNEY DOCKET NUMBER: | EMC-14-0905    |
|-------------------------|----------------|
| NAME OF SUBMITTER:      | KEVIN M. MASON |

| SIGNATURE:                               | /Kevin M. Mason/ |
|------------------------------------------|------------------|
| DATE SIGNED:                             | 05/19/2015       |
| Total Attachments: 12                    |                  |
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| source=EMC-14-0905_Assignment#           | page12.tif       |

| (Rev.6-93) PATENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | M COVER SHEET     U.S. DEPARTMENT OF COMMERCE       ONLY     Patent and Trademark Office                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| To the Honorable Commissioner of Patents and Trademarks:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Please record the attached original documents or copy thereof.                                                                                                                                                                                                                                                          |
| 1. Name of conveying party(ies):<br>Angelo E. M. Ciarlini, Fabio A.M. porto, Amir H.<br>K. Moghadam, Jonas F. Dias, Paulo de Figueiredo<br>Pires, Fabio A. Perosi, Alex L. Bordignon, Bruno<br>Carlos da Cunha Costa and Wagner dos Santos                                                                                                                                                                                                                                                                                                                  | 2. Name and address of receiving party(ies)<br>Name: EMC Corporation<br>Internal Address:                                                                                                                                                                                                                               |
| Vieira<br>Additional name(s) of conveying party(ies)<br>attached?<br>Yes X No                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Street Address: 176 South Street<br>City: Hopkinton State: MA ZIP: 01748                                                                                                                                                                                                                                                |
| 3. Nature of conveyance:         X Assignment       _ Merger         _ Security Agreement       _ Change of Name         _ Other                                                                                                                                                                                                                                                                                                                                                                                                                            | Additional name(s) & address(es) attached? _ Yes <u>X</u> No                                                                                                                                                                                                                                                            |
| Execution Date: 3/30/15, 3/30/15, 3/30/15, 3/30/15, 3/30/15, 3/30/15, 4/6/15, 3/30/15, 3/30/15, 3/30/15                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                         |
| Additional numbers attached? <u>Yes X No</u><br>5. Name and address of party to whom                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 6. Total number of applications and patents                                                                                                                                                                                                                                                                             |
| 5. Name and address of party to whom<br>correspondence concerning document should be<br>mailed:<br>Name: Kevin M. Mason<br>Internal Address: Ryan, Mason & Lewis, LLP<br>Street Address: 1175 Post Road East, 2 <sup>nd</sup> Floor                                                                                                                                                                                                                                                                                                                         | <ul> <li>6. Total number of applications and patents involved: <u>1</u></li> <li>7. Total Fee (37 CFR 3.41) \$ <u>0.00</u><br/> Enclosed<br/> Authorized to be charged to deposit account</li> </ul>                                                                                                                    |
| Additional numbers attached? <u>Yes X No</u><br>5. Name and address of party to whom<br>correspondence concerning document should be<br>mailed:<br>Name: Kevin M. Mason<br>Internal Address: Ryan, Mason & Lewis, LLP<br>Street Address: 1175 Post Road East, 2 <sup>nd</sup> Floor<br>City: Westport State: CT ZIP: 06880                                                                                                                                                                                                                                  | <ul> <li>6. Total number of applications and patents involved: <u>1</u></li> <li>7. Total Fee (37 CFR 3.41) \$ <u>0.00</u><br/> Enclosed</li> </ul>                                                                                                                                                                     |
| Additional numbers attached?Yes X_No         5. Name and address of party to whom         correspondence concerning document should be         mailed:         Name: Kevin M. Mason         Internal Address: Ryan, Mason & Lewis, LLP         Street Address: 1175 Post Road East, 2 <sup>nd</sup> Floor         City: Westport State: CT ZIP: 06880         DO NOT USE THIS SPACE         9. Statement and signature.         To the best of my knowledge and belief, the foregoing in         true copy of the original document.         Kevin M. Mason | <ul> <li>6. Total number of applications and patents involved: 1</li> <li>7. Total Fee (37 CFR 3.41) \$ 0.00<br/> Enclosed<br/> Authorized to be charged to deposit account</li> <li>8. Deposit account number 50-0762</li> </ul>                                                                                       |
| Additional numbers attached? <u>Yes X No</u><br>5. Name and address of party to whom<br>correspondence concerning document should be<br>mailed:<br>Name: Kevin M. Mason<br>Internal Address: Ryan, Mason & Lewis, LLP<br>Street Address: 1175 Post Road East, 2 <sup>nd</sup> Floor<br>City: Westport State: CT ZIP: 06880<br><u>DO NOT USE THIS SPACE</u><br>9. Statement and signature.<br>To the best of my knowledge and belief, the foregoing in<br>true copy of the original document.                                                                | 6. Total number of applications and patents<br>involved:1         7. Total Fee (37 CFR 3.41) \$ 0.00<br>Enclosed<br>Authorized to be charged to deposit account         8. Deposit account number 50-0762         formation is true and correct and any attached copy is a         M. Mason/       May 19, 2015<br>Date |

| PATENT |                    |  |  |  |
|--------|--------------------|--|--|--|
| REEL:  | 035670 FRAME: 0201 |  |  |  |

#### ASSIGNMENT

WHEREAS, we, Angelo E. M. Ciarlini, Fabio A. M. Porto, Amir H. K. Moghadam, Jonas F. Dias, Paulo de Figueiredo Pires, Fábio A. Perosi, Alex L. Bordignon, Bruno Carlos da Cunha Costa and Wagner dos Santos Vieira 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 METHODS AND APPARATUS FOR PARALLEL EVALUATION OF PATTERN QUERIES OVER LARGE N-DIMENSIONAL DATASETS TO IDENTIFY FEATURES OF INTEREST, the specification of which:

- [] is being executed on even date herewith and is about to be filed in the United States Patent Office;
- [X] was filed on March 30, 2015 as U.S. Application No. 14/672,516;
- [] 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.

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

Date:

Print full name of first inventor; Residence: Citizenship: Mailing Address:

Morch 30th 2015 Angels E. M. Cierkini Inventor's Signature

Angelo E. M. Ciarlini Rio de Janeiro, Brazil Brazil Av. Mal. Henrique Lott, 180 bl. 2 ap. 301, Barra da Tijuca Rio de Janeiro, RJ - Brazil 22631-370

Sunto En Truho Witness Rômulo T. A. PINHO

Winniews M. Gattin Witness VINICIUS Michel Gottin \_\_\_\_\_

-3-

Date: 30th March 2015

Print full name of second inventor: Residence: Citizenship:

Mailing Address:

Inventor

Fabio A. M. Porto Rio de Janeiro, Brazil Brazil Av. Tiradentes, 125/302, Petropolis Rio de Janeiro, RJ - Brazil 22685-311

Mitness DiAS JONA RTADO MONICA BARROS Witness

Date: March 30, 2015

Inventor's Signature

Print full name of third inventor: Residence:

Citizenship:

-----

Mailing Address:

ness JONAS DiAS FURTADO tron Witness FABIO ANORE PEROSi

Amir H. K. Moghadam Rio de Janeiro, Brazil Iranian R. Andre Cavalcante 13/703, Lapa Rio de Janiero, RJ - Brazil 20231-050

Date: March 2015 2,

Print full name of fourth inventor: Residence: Citizenship: Mailing Address:

50 )ias  $On\Lambda$ Inventor's Signature

Jonas F. Dias Rio de Janeiro, Brazil Brazil R Cambauba 500/102 Rio de Janeiro, RJ - Brazil 21940-005

inho Witness` Rômulo T. A. PINHO

Witness Vivícius Michel Gottin

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Date: Mon ch 30, 2015

pulo Mil MM.

Print full name of fifth inventor: Residence: Citizenship: Mailing Address:

Paulo de Figueiredo Pires Rio de Janeiro, Brazil Brazil Professor Saldanha 146- 301 - Lagoa Rio de Janeiro, Brazil 22461-220

Hanric Communic Villieb (FLANIA COIMBRA DELLIATO) Witness (JESUS MARTIN TALAVERA PORTOCARRERD) Witness

Spril-06-2015 Date:

Print full name of sixth inventor: Residence:

Citizenship:

Mailing Address:

Witnes JOSE ROBERTO DELBONI

Inventor's Signature

Fábio A. Perosi Rio de Janeiro, Brazil Brazil Rua Teófilo Guimarães, 479, Jd. Sulacap Rio de Janeiro, RJ - Brazil 21741-040

Maxileia Comes dos Santos Ribeiro Witness MARILÉA GOMES DOS SANTOS RIBEIRO

PATENT REEL: 035670 FRAME: 0209

-8-

Date: 2015 and

ondraugh Br Ø Inventor's Signature

Print full name of seventh inventor: Residence:

Citizenship:

Mailing Address:

Alex L. Bordignon Rio de Janeiro, Brazil Brazil Mario Viana, 734, ap. 604 bl 7 Niterói Rio de Janeiro, RJ - Brazil 24241-001

DiAs these JONAS FURTADO

Witness ALMEIDA MAXIMO DE F

Date:

MARCH 30, 2015

Inventor's Signature

Print full name of eighth inventor: Residence: Citizenship: Mailing Address: Bruno Carlos da Cunha Costa Rio de Janeiro, Brazil Brazil Rua Juruena, 160, Agriões Rio de Janeiro, RJ - Brazil 25963-040

LUIZ DA CUNHA COSTA Witness FELIPE

Witness JORGE LUIZ COUTINHO DA COSTA

Date:

March 30, 2015

Sontos Vieira Wagne Inventor's Signature

Print full name of ninth inventor: Residence: Citizenship: Mailing Address:

Wagner dos Santos Vieira Rio de Janeiro, Brazil Brazil Rua Abadiana, 179/1202 Rio de Janeiro, RJ - Brazil 22780-000

<u>Flana Miranda Concolres</u> Witness Flávia Miranda Gorícalves

**RECORDED: 05/19/2015** 

Musiko Misy Kills da Silva Witness Nivaldo Diogo Teles da Silva

#### PATENT REEL: 035670 FRAME: 0212

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