

PATENT ASSIGNMENT

Electronic Version v1.1
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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>Siva Dharshan Muruganathan</td> <td>07/17/2012</td> </tr> <tr> <td>Tarik Tabet</td> <td>07/17/2012</td> </tr> <tr> <td>Chandra Sekhar Bontu</td> <td>07/17/2012</td> </tr> <tr> <td>Yi Song</td> <td>07/17/2012</td> </tr> <tr> <td>Zhijun Cai</td> <td>07/25/2012</td> </tr> </tbody> </table>		Name	Execution Date	Siva Dharshan Muruganathan	07/17/2012	Tarik Tabet	07/17/2012	Chandra Sekhar Bontu	07/17/2012	Yi Song	07/17/2012	Zhijun Cai	07/25/2012
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RECEIVING PARTY DATA													
<table border="1"> <tr> <td>Name:</td> <td>Research In Motion Limited</td> </tr> <tr> <td>Street Address:</td> <td>295 Phillip Street</td> </tr> <tr> <td>City:</td> <td>Waterloo, Ontario</td> </tr> <tr> <td>State/Country:</td> <td>CANADA</td> </tr> <tr> <td>Postal Code:</td> <td>N2L 3W8</td> </tr> </table>		Name:	Research In Motion Limited	Street Address:	295 Phillip Street	City:	Waterloo, Ontario	State/Country:	CANADA	Postal Code:	N2L 3W8		
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CORRESPONDENCE DATA													
<p>Fax Number: 2024084400 Phone: 202-408-4000 Email: janet.weems@finnegan.com <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Bryan C. Diner Address Line 1: 901 New York Avenue NW Address Line 4: Washington, DISTRICT OF COLUMBIA 20001</p>													
ATTORNEY DOCKET NUMBER:	11298.0358-00000												
NAME OF SUBMITTER:	BRYAN C. DINER												

OP \$40.00 13546926

Total Attachments: 8

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WORLDWIDE ASSIGNMENT

WHEREAS, I/WE, (hereinafter referred to as the "ASSIGNOR(S)");

Siva Dharshan Muruganathan, 4000 Innovation Drive, Ext. 12692, Kanata, Ontario, K2K 3K1, CANADA

Tarik Tabet, 3602 Rue Monsabre, Montreal, Quebec, H1M 2P6, CANADA

Chandra Sekhar Bontu, 4000 Innovation Drive, Ext. 12692, Kanata, Ontario, K2K 3K1, CANADA

Yi Song, 5000 Riverside Drive, Brazos East, Suite 100, Ext. 63457, Irving, TX 75039, USA

Zhijun Cai, 5000 Riverside Drive, Brazos East, Suite 100, Ext. 63457, Irving, TX 75039, USA

am an/are inventor(s) of an invention entitled **PHASE-ROTATED REFERENCE SIGNALS FOR MULTIPLE ANTENNAS** ("Invention") for which one or more applications for patent, design registration, utility model registration, or other form of protection, rights, or title have been or will be made in certain countries ("Applications"), as further described below:

UNITED STATES APPLICATION # 13/546,926 FILED: JULY 11, 2012

AND WHEREAS, **RESEARCH IN MOTION LIMITED**, (hereinafter referred to as the "ASSIGNEE"), a company organized under the laws of the Province of Ontario, Canada, having a place of business at 295 Phillip Street, Waterloo, Ontario, N2L 3W8, Canada, is desirous of acquiring the full and exclusive right, title and interest in and to said Invention, said Applications inclusive of all ancillary rights relating thereto, any and all priority rights derived from said Applications, and all patents, design registrations, utility model registrations and other forms of protection, rights and titles relating to said Invention, in any country or countries and in respect of the whole or any part or parts of or improvements to the Invention;

NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR(S) does/do hereby confirm that ASSIGNOR(S) has/have transferred, conveyed and assigned, and by way of further assurance does/do hereby transfer, convey and assign, any and all of ASSIGNOR(S)'s respective rights, title and interest in and to: the Invention; the Applications; inclusive of any and all priority rights, including the right to claim priority, derived from the Applications; any further applications for patent, design registration, utility model registration or other forms of protection, rights or titles for the whole or any part or parts of or improvements to the Invention in any country or countries ("Further Applications") together with the right to file divisional applications, substitute applications and continuation applications of any one or more of the Applications and Further Applications

("Divisionals"); the right to obtain patents, design registrations, utility model registrations and all other forms of protection, rights and titles relating to the Invention; the right in and to any patent or reissue patent relating to the Applications, Further Applications and Divisionals ("Grants"); and the right to obtain any extensions / supplementary protection certificates ("Extensions"); together with the right to bring proceedings to recover damages and/or to obtain other remedies for acts committed in respect of one or more of the aforesaid Invention, Applications, Grants, Further Applications, Divisionals and Extensions, whether such acts are committed before or after the date of this Worldwide Assignment; with the intent that the Invention, Applications, Grants, Further Applications, Divisionals and Extensions are owned and enjoyed by ASSIGNEE absolutely to the full end of the term or terms for same.

ASSIGNOR(S) does/do hereby agree, upon request, to provide assistance and to execute any and all further documents, at the expense of ASSIGNEE and/or its successors and assigns (as applicable), which may be necessary or desirable to enable ASSIGNEE, and/or its successors and assigns (as applicable), to file, prosecute, bring proceedings and take other actions with respect to any and all of the Invention, Applications, Further Applications, Divisionals, Grants and Extensions, and any and all patents and registrations granted thereon and other forms of protection, rights and titles relating thereto, and ASSIGNOR(S) further agrees/agree to execute, upon request and at the expense of ASSIGNEE and/or its successors and assigns (as applicable), any and all further documents which may be necessary or desirable to vest or perfect the title of ASSIGNEE therein.

ASSIGNOR(S) does/do hereby authorize ASSIGNEE or its patent agents or attorneys to insert, above, the jurisdictions, application numbers, filing dates and any other indicia identifying the Applications when such information is available for the purpose of recording this assignment.

ASSIGNOR(S) does/do hereby authorize and request The Commissioner of Patents or any equivalent authority to issue to ASSIGNEE each and every patent, registration and other form of protection, right, and title granted upon the Applications, Further Applications, Divisionals and Extensions.

THIS WORLDWIDE ASSIGNMENT shall inure to the benefit of ASSIGNEE and its successors and assigns, and shall be binding upon ASSIGNOR(S) and their successors and permitted assigns.

DELIVERY of this Worldwide Assignment by copy, however transmitted, constitutes valid and effective delivery. This Worldwide Assignment may be executed in one or more counterparts, each of which when so executed and delivered shall be an original, and such counterparts shall together constitute one and the same instrument.

IN WITNESS WHEREOF, this Worldwide Assignment has been executed below by the undersigned:

Siva Muruganathan
Siva Dharsham Muruganathan
4000 Innovation Drive, Ext. 12692
Kanata, Ontario, K2K 3K1, CANADA

Date: July 17, 2012

STATEMENT BY WITNESS

I, Masoud Ebrahimi, whose full Post Office address is

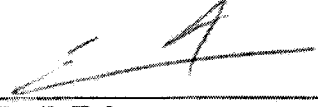
450 March Rd., Ottawa, ON K2K 3K2
(Address of Witness)

hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Worldwide Assignment, duly sign and execute same.

Masoud Ebrahimi
(Signature of Witness)

Date: July 17, 2012

IN WITNESS WHEREOF, this Worldwide Assignment has been executed below by the undersigned:



Tarik Tabet
3602 Rue Monsabre
Montreal, Quebec, H1M 2P6, CANADA


Date: 17 - July - 2012

STATEMENT BY WITNESS

I, Safar ELUAAMARI, whose full Post Office address is

3602 Rue Monsabre Montreal, QC H1M 2P6, CANADA
(Address of Witness)

hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Worldwide Assignment, duly sign and execute same.



(Signature of Witness)

Date: 17 - July - 2012

IN WITNESS WHEREOF, this Worldwide Assignment has been executed below by the undersigned:

AS Bontu S.
✓ Chandra Sekhar Bontu
4000 Innovation Drive, Ext. 13756
Kanata, Ontario, K2K 3K1, CANADA

Date: July 17, 2012

STATEMENT BY WITNESS

I, YAN XIAO, whose full Post Office address is

4000 Innovation Drive, Kanata, Ontario, K2K 3K1 Canada
(Address of Witness)

hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Worldwide Assignment, duly sign and execute same.

Yan Xiao
(Signature of Witness)

Date: July 17, 2012

IN WITNESS WHEREOF, this Worldwide Assignment has been executed below by the undersigned:

Y Song

Date: July 17, 2012

Yi Song
5000 Riverside Drive, Brazos East, Suite 100, Ext. 63457
Irving, TX 75039, USA

STATEMENT BY WITNESS

I, Cathy Cox, whose full Post Office address is

5000 Riverside Dr. Irving, TX 75039
(Address of Witness)

hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Worldwide Assignment, duly sign and execute same.

Cathy Cox
(Signature of Witness)

Date: 17 July 2012

IN WITNESS WHEREOF, this Worldwide Assignment has been executed below by the undersigned:



Zhijun Cai

5000 Riverside Drive, Brazos East, Suite 100, Ext. 63775
Irving, TX 75039, USA

Date:

7/25/2012

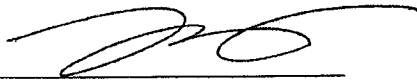
STATEMENT BY WITNESS

I, Frank Geng, whose full Post Office address is

7034 Desco Dr., Dallas, TX 75225

(Address of Witness)

hereby declare that I was personally present and did see the above named person, personally known to me to be a person named in the Worldwide Assignment, duly sign and execute same.



(Signature of Witness)

Date:

7/25/2012