

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT2582176

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>ZHIJUN CAI</td> <td>10/11/2013</td> </tr> <tr> <td>YI SONG</td> <td>10/11/2013</td> </tr> </tbody> </table>		Name	Execution Date	ZHIJUN CAI	10/11/2013	YI SONG	10/11/2013
Name	Execution Date						
ZHIJUN CAI	10/11/2013						
YI SONG	10/11/2013						
RECEIVING PARTY DATA							
Name:	BLACKBERRY CORPORATION						
Street Address:	1209 ORANGE STREET						
Internal Address:	THE CORPORATION TRUST CENTER						
City:	WILMINGTON						
State/Country:	DELAWARE						
Postal Code:	19801						
PROPERTY NUMBERS Total: 2							
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13776985</td> </tr> <tr> <td>Application Number:</td> <td>13792784</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13776985	Application Number:	13792784
Property Type	Number						
Application Number:	13776985						
Application Number:	13792784						
CORRESPONDENCE DATA							
Fax Number:	(877)769-7945						
Email:	apsi@fr.com						
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>							
Correspondent Name:	FISH & RICHARDSON P.C.						
Address Line 1:	P.O. BOX 1022						
Address Line 4:	MINNEAPOLIS, MINNESOTA 55440						
ATTORNEY DOCKET NUMBER:	31234-0044						
NAME OF SUBMITTER:	CHRISTIE LOVEN						
Signature:	/Christie Loven/						

Date:

10/17/2013

**Total Attachments: 8**

source=31234-0044001\_Asgn\_BBCorp#page1.tif

source=31234-0044001\_Asgn\_BBCorp#page2.tif

source=31234-0044001\_Asgn\_BBCorp#page3.tif

source=31234-0044001\_Asgn\_BBCorp#page4.tif

source=31234-0044001\_Asgn\_BBCorp#page5.tif

source=31234-0044001\_Asgn\_BBCorp#page6.tif

source=31234-0044001\_Asgn\_BBCorp#page7.tif

source=31234-0044001\_Asgn\_BBCorp#page8.tif

**WORLDWIDE ASSIGNMENT**

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

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

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

am an/are inventor(s) of an invention entitled **METHOD AND APPARATUS FOR SMALL CELL CONFIGURATION IN A HETEROGENEOUS NETWORK ARCHITECTURE** ("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:

**US, Application # 13/776,985 filed 26 February 2013**

**US, Application # 13/792,784 filed 11 March 2013**

AND WHEREAS, **BLACKBERRY CORPORATION**, (hereinafter referred to as the "ASSIGNEE"), a company organized under the laws of the State of Delaware, U.S.A., having a place of business at The Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware, 19801, U.S.A., 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.

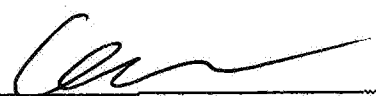
ASSIGNOR(S) does/do hereby authorize ASSIGNEE or its patent agents or attorneys to insert, above, the jurisdictions, application numbers, filing dates and any other indicia identifying the Applications when such information is available for the purpose of recording this assignment.

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:



Date: Oct 11/2013

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

STATEMENT BY WITNESS

I, Kelly Lucas, whose full Post Office address is

43053 Thornapple Gap Rd Abbots VA 22018  
(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: 10-11-13

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

Date: \_\_\_\_\_

\_\_\_\_\_  
**SONG, Yi**  
**5000 Riverside Drive, Brazos East, Suite 100, Ext. 63457,**  
**Irving, TX 75039,**  
**USA**

**STATEMENT BY WITNESS**

I, \_\_\_\_\_, whose full Post Office address is

\_\_\_\_\_  
(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.

Date: \_\_\_\_\_

\_\_\_\_\_  
(Signature of Witness)

**WORLDWIDE ASSIGNMENT**

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

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

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

am an/are inventor(s) of an invention entitled **METHOD AND APPARATUS FOR SMALL CELL CONFIGURATION IN A HETEROGENEOUS NETWORK ARCHITECTURE** ("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:

**US, Application # 13/776,985 filed 26 February 2013**

**US, Application # 13/792,784 filed 11 March 2013**

AND WHEREAS, **BLACKBERRY CORPORATION**, (hereinafter referred to as the "ASSIGNEE"), a company organized under the laws of the State of Delaware, U.S.A., having a place of business at The Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware, 19801, U.S.A., 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:

Date: \_\_\_\_\_

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

STATEMENT BY WITNESS

I, \_\_\_\_\_, whose full Post Office address is


\_\_\_\_\_  
(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.

Date: \_\_\_\_\_

\_\_\_\_\_  
(Signature of Witness)

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

  
\_\_\_\_\_  
Date: Oct. 11, 2013  
**SONG, Yi**  
**5000 Riverside Drive, Brazos East, Suite 100, Ext. 63457,**  
**Irving, TX 75039,**  
**USA**

STATEMENT BY WITNESS

I, Min Yuan, whose full Post Office address is  
2216 Windy Ridge Ct., Plano, Tx. 75025  
(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: 10/11/2013