

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4359670

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
YOUN HYOUNG HEO	10/28/2010
MO-HAN FONG	08/11/2013
MARK EARNSHAW	10/06/2010
RECEIVING PARTY DATA	
Name:	RESEARCH IN MOTION LIMITED
Street Address:	295 PHILLIP STREET
City:	WATERLOO, ON
State/Country:	CANADA
Postal Code:	N2L 3W8
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15017962
CORRESPONDENCE DATA	
Fax Number:	(561)989-9812
<i>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.</i>	
Phone:	561-989-9811
Email:	ptoboca@fggbb.com
Correspondent Name:	FLEIT GIBBONS GUTMAN BONGINI & BIANCO P.L.
Address Line 1:	4800 N. FEDERAL HIGHWAY
Address Line 2:	SUITE B306
Address Line 4:	BOCA RATON, FLORIDA 33431
ATTORNEY DOCKET NUMBER:	39479-US-CNT2
NAME OF SUBMITTER:	JON GIBBONS
SIGNATURE:	/Jon Gibbons/
DATE SIGNED:	04/08/2017
Total Attachments: 15	
source=39479-ID_ASN_Heo_2010-10-28#page1.tif	
source=39479-ID_ASN_Heo_2010-10-28#page2.tif	
source=39479-ID_ASN_Heo_2010-10-28#page3.tif	

source=39479-ID_ASN_Heo_2010-10-28#page4.tif
source=39479-ID_ASN_Heo_2010-10-28#page5.tif
source=39479_2013-08-11_ASN_Fong#page1.tif
source=39479_2013-08-11_ASN_Fong#page2.tif
source=39479_2013-08-11_ASN_Fong#page3.tif
source=39479_2013-08-11_ASN_Fong#page4.tif
source=39479_2013-08-11_ASN_Fong#page5.tif
source=39479-ID_ASN_Earnshaw_2010-10-06#page1.tif
source=39479-ID_ASN_Earnshaw_2010-10-06#page2.tif
source=39479-ID_ASN_Earnshaw_2010-10-06#page3.tif
source=39479-ID_ASN_Earnshaw_2010-10-06#page4.tif
source=39479-ID_ASN_Earnshaw_2010-10-06#page5.tif

WORLDWIDE ASSIGNMENT

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

YOUN HYOUNG HEO

78357 - 176 Columbia Street West, Waterloo, ON N2L 3L3 CANADA

MO-HAN FONG

13750 - 4000 Innovation Drive, Ottawa, ON K2K 3K1 CANADA

MARK EARNSHAW

13208 - 450 March Road, Ottawa, ON K2K 3K2 CANADA

has/have invented a **SOUNDING REFERENCE SIGNAL TRANSMISSION IN CARRIER AGGREGATION** ("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:

PCT PATENT APPLICATION NO. PCT/US10/49408, FILED 09/17/2010

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; 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: October 28, 2010



YOUN HYOUNG HEO
78357 - 176 Columbia Street West
Waterloo, ON N2L 3L3 CANADA

STATEMENT BY WITNESS

I, Mina Ayatollahi, whose full Post Office address is

714 Brookmill place, Waterloo, ON N2V 2P1
(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: Oct 28, 2010

M. Ayatollahi
(Signature of Witness)

RIM Family Ref. No.: 39479-WO-PCT

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

Date: October 20, 2010

MO-HAN FONG
13750 - 4000 Innovation Drive
Ottawa, ON K2K 3K1 CANADA

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)

RIM Family Ref. No.: 39479-WO-PCT

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

Date: _____

MARK EARNSHAW
13208 – 450 March Road
Ottawa, ON K2K 3K2 CANADA

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)");

HEO, Youn Hyung, 945-303, Pureunmaeul Moamiredo APT, Neung-dong, Hwasung-si, Gyunggi-do, Republic of Korea

FONG, Mo-Han, ~~400 E. Remington Drive #B213, Sunnyvale, California, 94087~~ *409 Spencer Terrace, Sunnyvale, CA 94089 USA* *Jeff*

EARNSHAW, Andrew Mark, 4000 Innovation Drive, Ext. 13208, Kanata, Ontario, K2K 3K1 Canada

am an/are inventor(s) of an invention entitled **SOUNDING REFERENCE SIGNAL TRANSMISSION IN CARRIER AGGREGATION** ("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:

PCT, APPLICATION #PCT/US2010/049408, FILING DATE: September 17, 2010

TW, APPLICATION #100133510, FILING DATE: September 16, 2011

US, APPLICATION #13/840677, FILING DATE: March 15, 2013

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:

Date: _____

HEO, Youn Hyoung

945-303, Pureunmaeul Moamiredo APT

Neung-dong, Hwasung-si, Gyunggi-do

Republic of Korea

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: August 11, 2013

FONG, Mo-Han
409 Spencer Terrace
400 E. Remington Drive #B213

Sunnyvale, California, ~~94089~~ 94089
USA 

STATEMENT BY WITNESS

I, Diane Wiggard, whose full Post Office address is

2000 Bridge Parkway, Suite 100, Redwood City, CA 94065, US
(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: August 11, 2013

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

Date: _____

EARNSHAW, Andrew Mark
4000 Innovation Drive, Ext. 13208
Kanata, Ontario, K2K 3K1 Canada

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)");

YOUNG HYOUNG HEO

78357 - 176 Columbia Street West, Waterloo, ON N2L 3L3 CANADA

MO-HAN FONG

13750 - 4000 Innovation Drive, Ottawa, ON K2K 3K1 CANADA

MARK EARNSHAW

13208 - 450 March Road, Ottawa, ON K2K 3K2 CANADA

has/have invented a **SOUNDING REFERENCE SIGNAL TRANSMISSION IN CARRIER AGGREGATION** ("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:

PCT PATENT APPLICATION NO. PCT/US10/49408, FILED 09/17/2010

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; 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.

RIM Family Ref. No.: 39479-WO-PCT

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

Date: _____

YOUN HYOUNG HEO
78357 - 176 Columbia Street West
Waterloo, ON N2L 3L3 CANADA

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)

RIM Family Ref. No.: 39479-WO-PCT

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

Date: _____

MO-HAN FONG
13750 - 4000 Innovation Drive
Ottawa, ON K2K 3K1 CANADA

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)

RIM Family Ref. No.: 39479-WO-PCT

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

Date: October 6/2010

Mark Earnshaw
MARK EARNSHAW
13208 - 450 March Road
Ottawa, ON K2K 3K2 CANADA

STATEMENT BY WITNESS

I, JOHN PANICKER, whose full Post Office address is

1603 DES GRIVES OTTAWA ON K1C5C3
(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: 6 Oct 2010

John Panicker
(Signature of Witness)

JOHN PANICKER