

PATENT ASSIGNMENT

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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>Boon Loong Ng</td> <td>07/08/2013</td> </tr> <tr> <td>Younsun Kim</td> <td>07/16/2013</td> </tr> <tr> <td>Young-Han Nam</td> <td>07/10/2013</td> </tr> <tr> <td>Hyojin Lee</td> <td>07/16/2013</td> </tr> <tr> <td>Krishna Sayana</td> <td>07/08/2013</td> </tr> </tbody> </table>		Name	Execution Date	Boon Loong Ng	07/08/2013	Younsun Kim	07/16/2013	Young-Han Nam	07/10/2013	Hyojin Lee	07/16/2013	Krishna Sayana	07/08/2013
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RECEIVING PARTY DATA													
Name:	SAMSUNG ELECTRONICS CO., LTD.												
Street Address:	129, Samsung-ro												
Internal Address:	Yeongtong-gu, Suwon-si												
City:	Gyeonggi-do												
State/Country:	KOREA, REPUBLIC OF												
Postal Code:	443-742												
PROPERTY NUMBERS Total: 1													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13942186</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13942186								
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CORRESPONDENCE DATA													
Fax Number:	9726283616												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
Phone:	927-628-3600												
Email:	patents@munckwilson.com												
Correspondent Name:	Docket Clerk - SAMS												
Address Line 1:	P.O. Drawer 800889												
Address Line 4:	Dallas, TEXAS 75380												
ATTORNEY DOCKET NUMBER:	2012.11.002.SR0												
NAME OF SUBMITTER:	Michael G. Rodriguez												

CH \$40.00 13942186

Signature:	/Michael G. Rodriguez/
Date:	08/14/2013
Total Attachments: 6 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif source=Assignment#page6.tif	

ASSIGNMENT

WHEREAS, We, Boon Loong Ng, resident of Dallas, Dallas County, Texas, citizen of Australia, Younsun Kim, resident of Sungnam-shi, Kyeonggi, Korea, citizen of Korea, Young-Han Nam, resident of Richardson, Collin County, Texas, citizen of Korea, Hyojin Lee, resident of Gangnam-gu, Seoul, Korea, citizen of Korea, and Krishna Sayana, resident of San Jose, Santa Clara County, California, citizen of India, have invented certain new and useful improvements in "TRANSMISSION SCHEME AND QUASI CO-LOCATION ASSUMPTION OF ANTENNA PORTS FOR PDSCH OF TRANSMISSION MODE 10 FOR LTE ADVANCED" disclosed in an application for United States Letters Patent (Application No. _____, filed _____), said application having been executed concurrently herewith;

WHEREAS, SAMSUNG ELECTRONICS CO., LTD, a corporation organized under the laws of the Republic of Korea, having a place of business at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, Republic of Korea (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring my entire right, title and interest in and to the invention, and in and to the said application and any Letters Patent that may issue thereon;

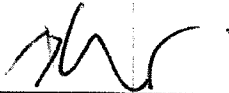
NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest in and to said invention and in and to said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, continuations-in-part and extensions thereof; I authorize William A. Munck of Munck Wilson Mandala, LLP to insert in the parenthesis above the application number and filing date of said application when known; and I hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as our interest is concerned, to the said ASSIGNEE of my entire right, title and interest.

I also hereby sell and assign to said ASSIGNEE, its successors, assigns and legal representatives the full and exclusive rights, title and interest to the invention disclosed in said application throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said invention in its own name throughout the world including all rights of priority, all rights to publish cautionary notices reserving ownership of said invention and all rights to register said invention in appropriate registries; and I further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such rights, title and interest in ASSIGNEE, its successors, assigns and legal representatives.

I hereby further agree that I will communicate to said ASSIGNEE, or to its successors, assigns and legal representatives, any facts known to me respecting any improvements; and, at the expense of said ASSIGNEE, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, and make all lawful

oaths, and generally do everything possible to vest title in said ASSIGNEE and to aid said ASSIGNEE, its successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 8th day of JULY, 2013.



Boon Loong Ng

STATE OF TEXAS

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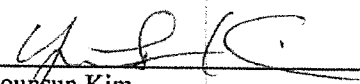
COUNTY OF _____

On this ____ day of _____, 2013, before me, a Notary Public in and for the State and County aforesaid, personally appeared Boon Loong Ng, known to me to be the person named above who signed and sealed the foregoing instrument, and acknowledged the same to be his/her own free act and deed.

Notary Public, State of Texas

My Commission Expires:

Date: July 16th, 2013


Younsun Kim

STATE OF TEXAS

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COUNTY OF _____

On this ____ day of _____, 2013, before me, a Notary Public in and for the State and County aforesaid, personally appeared Younsun Kim, known to me to be the person named above who signed and sealed the foregoing instrument, and acknowledged the same to be his/her own free act and deed.

Notary Public, State of Texas

My Commission Expires:

Date: 7/10/2013



Young-Han Nam

STATE OF TEXAS

§

COUNTY OF _____

§

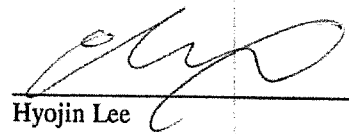
§

On this ____ day of _____, 2013, before me, a Notary Public in and for the State and County aforesaid, personally appeared Young-Han Nam, known to me to be the person named above who signed and sealed the foregoing instrument, and acknowledged the same to be his/her own free act and deed.

Notary Public, State of Texas

My Commission Expires:

Date: July 16th, 2013



Hyojin Lee

STATE OF TEXAS

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COUNTY OF _____

On this ____ day of _____, 2013, before me, a Notary Public in and for the State and County aforesaid, personally appeared Hyojin Lee, known to me to be the person named above who signed and sealed the foregoing instrument, and acknowledged the same to be his/her own free act and deed.

Notary Public, State of Texas

My Commission Expires:

Date: 7/8/2013

Krishna Sayana
Krishna Sayana

STATE OF TEXAS

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COUNTY OF _____

On this ____ day of _____, 2013, before me, a Notary Public in and for the State and County aforesaid, personally appeared Krishna Sayana, known to me to be the person named above who signed and sealed the foregoing instrument, and acknowledged the same to be his/her own free act and deed.

Notary Public, State of Texas

My Commission Expires:
