

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2575172

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>WOOGEUN RHEE</td> <td>10/07/2013</td> </tr> <tr> <td>FEI CHEN</td> <td>10/07/2013</td> </tr> <tr> <td>JONG JIN KIM</td> <td>10/07/2013</td> </tr> <tr> <td>DONG WOOK KIM</td> <td>10/07/2013</td> </tr> <tr> <td>ZHIHUA WANG</td> <td>10/07/2013</td> </tr> </tbody> </table>		Name	Execution Date	WOOGEUN RHEE	10/07/2013	FEI CHEN	10/07/2013	JONG JIN KIM	10/07/2013	DONG WOOK KIM	10/07/2013	ZHIHUA WANG	10/07/2013
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<table border="1"> <tr> <td>Name:</td> <td>SAMSUNG ELECTRONICS CO., LTD.</td> </tr> <tr> <td>Street Address:</td> <td>129, SAMSUNG-RO, YEONGTONG-GU, GYEONGGI-DO, 443-742</td> </tr> <tr> <td>City:</td> <td>SUWON-SI</td> </tr> <tr> <td>State/Country:</td> <td>KOREA, REPUBLIC OF</td> </tr> </table>		Name:	SAMSUNG ELECTRONICS CO., LTD.	Street Address:	129, SAMSUNG-RO, YEONGTONG-GU, GYEONGGI-DO, 443-742	City:	SUWON-SI	State/Country:	KOREA, REPUBLIC OF				
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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>13966462</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13966462								
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CORRESPONDENCE DATA													
Fax Number:	(202)315-3758												
Phone:	202-429-0020												
Email:	pto@nsiplaw.com												
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>													
Correspondent Name:	NSIP LAW												
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Address Line 4:	WASHINGTON, DISTRICT OF COLUMBIA 20035												

OP \$40.00 13966462

ATTORNEY DOCKET NUMBER:	011052.0159
NAME OF SUBMITTER:	JONATHAN D. SCHLAIFER
Signature:	/Jonathan D. Schlaifer/
Date:	10/11/2013
Total Attachments: 2 source=NTFMP20130910_0110520159_Executed_Assignment_asfiled#page1.tif source=NTFMP20130910_0110520159_Executed_Assignment_asfiled#page2.tif	

ASSIGNMENT

For valuable consideration, we,

Woogeun RHEE	Tsinghua University, Haidian District, Beijing 100084, P.R. China
Fei CHEN	Tsinghua University, Haidian District, Beijing 100084, P.R. China
Jong Jin KIM	Samsung Advanced Institute of Technology, Mt. 14-1, Nongseo-dong, Giheung-gu, Yongin-si, Gyeonggi-do, 446-712, Republic of Korea
Dong Wook KIM	Samsung Advanced Institute of Technology, Mt. 14-1, Nongseo-dong, Giheung-gu, Yongin-si, Gyeonggi-do, 446-712, Republic of Korea
Zhibua WANG	Tsinghua University, Haidian District, Beijing 100084, P.R. China

hereby assign to:

(1) **SAMSUNG ELECTRONICS CO., LTD.**, a Republic of Korea corporation having principal executive offices or place of business at:

129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, Republic of Korea,
and

(2) **Tsinghua University**, a Chinese institution having its principal executive offices or place of business at:

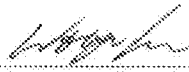
Tsinghua University, Haidian District, Beijing, 100084, P.R. China,

its successors and assigns (collectively hereinafter called "the Assignees"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of U.S. Patent Application Number 13/966,462 filed August 14, 2013 at the U.S. Patent & Trademark Office signed by us, with title **APPARATUS AND METHOD FOR ULTRA WIDEBAND COMMUNICATION USING DUAL BAND PASS FILTER**, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and application serial number of said application when known; this Assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and

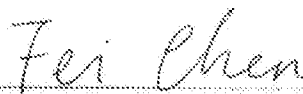
assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, preliminary statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.

IN TESTIMONY/WITNESS WHEREOF, we, undersigned inventors (Assignors) intending to be legally bound, have hereto affixed our signatures.

This 7 day of Oct, 2013


Signature: Woogeun RHEE

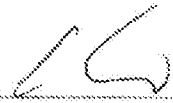
This 7 day of Oct, 2013


Signature: Fei CHEN

This 7 day of Oct, 2013


Signature: Jong Jin KIM

This 7 day of Oct, 2013


Signature: Dong Wook KIM

This 7 day of Oct, 2013


Signature: Zhitua WANG