

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

| 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>Jong Bu LIM</td> <td>04/23/2012</td> </tr> <tr> <td>Ui Kun KWON</td> <td>04/23/2012</td> </tr> <tr> <td>Sang Joon KIM</td> <td>04/23/2012</td> </tr> </tbody> </table> | | Name | Execution Date | Jong Bu LIM | 04/23/2012 | Ui Kun KWON | 04/23/2012 | Sang Joon KIM | 04/23/2012 |
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| Jong Bu LIM | 04/23/2012 | | | | | | | | |
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| Sang Joon KIM | 04/23/2012 | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | |
| <table border="1"> <tr> <td>Name:</td> <td>Samsung Electronics Co., Ltd.</td> </tr> <tr> <td>Street Address:</td> <td>416, Maetan-dong, Yeongtong-gu, Suwon-si, 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: | 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742 | City: | Suwon-si | State/Country: | KOREA, REPUBLIC OF |
| Name: | Samsung Electronics Co., Ltd. | | | | | | | | |
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| State/Country: | KOREA, REPUBLIC OF | | | | | | | | |
| 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>13464201</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13464201 | | | | |
| Property Type | Number | | | | | | | | |
| Application Number: | 13464201 | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | |
| <p>Fax Number:</p> <p>Phone: 202-429-0020</p> <p>Email: info@nsiplaw.com</p> <p><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: NSIP LAW</p> <p>Address Line 1: P.O. Box 34688</p> <p>Address Line 4: Washington, DISTRICT OF COLUMBIA 20043</p> | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 012052.0061 | | | | | | | | |
| NAME OF SUBMITTER: | Charles Y. Park | | | | | | | | |
| <p>Total Attachments: 2</p> <p>source=NewApp_12520061_20120425LFC_AssignmentExecuted#page1.tif</p> <p>source=NewApp_12520061_20120425LFC_AssignmentExecuted#page2.tif</p> | | | | | | | | | |

OP \$40.00 13464201

ASSIGNMENT

For valuable consideration, we,

| | |
|----------------------|---|
| Jong Bu LIM | No. 1-508, Dormitory, Samsung Advanced Institute of Technology, Nongseo-dong, Giheung-gu, Yongin-si, Gyeonggi-do 446-712, Republic of Korea |
| Ui Kun KWON | No. 245-1304, Sibeom Hanbit Maeul Kumho Euollim Apt., Bansong-dong, Hwaseong-si, Gyeonggi-do 445-725, Republic of Korea |
| Sang Joon KIM | No. 212-104, Hanjin Apt., Donam 2-dong, Seongbuk-gu, Seoul 136-753 Republic of Korea |

hereby assign to:

SAMSUNG ELECTRONICS CO., LTD., a Republic of Korea
corporation/institution/foundation/institute having principal executive office(s) or place
of business at: 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742,
Republic of Korea; and

its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of U.S. Patent Application Number _____ filed _____ at the U.S. Patent & Trademark Office signed by us, with title **COMMUNICATION SECURITY METHOD AND APPARATUS OF FIRST NODE AND SECOND NODE COMMUNICATING BASED ON FULL DUPLEX COMMUNICATION SCHEME USING NEAR FIELD**, 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.

WIP LAW SYSTEM 3/2011

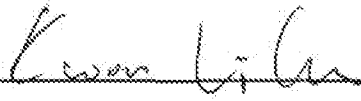
IN TESTIMONY/WITNESS WHEREOF, we, undersigned inventors (Assignors) intending to be legally bound, have hereto affixed our signatures.

This 27 day of April, 2012



Signature: Jong Bu LIM

This 23 day of April, 2012



Signature: Ui Kun KWON

This 23 day of April, 2012



Signature: Sang Joon KIM