PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------|----------------|
| Hyoung Jin KWON | 04/14/2009 |
| Jin Kyeong KIM | 04/14/2009 |
| Yong Sun KIM | 04/14/2009 |
| Seung Eun HONG | 04/14/2009 |
| Kyeongpyo KIM | 04/14/2009 |
| Woo Yong LEE | 04/14/2009 |

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| City: | Daejeon |
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| Postal Code: | 305-700 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 12464122 |

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REEL: 022702 FRAME: 0363

| NAME OF SUBMITTER: | J. Randall Beckers |
|--|--------------------|
| Total Attachments: 1 source=AssignmentAsFiled#page1.tif | |

PATENT REEL: 022702 FRAME: 0364

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U.S. ASSIGNMENT

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IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by

(Insert Name(s) & Address(es) of ASSIGNEE(S))

RECORDED: 05/18/2009

Electronics and Telecommunications Research Institute 161 Gajeong-dong, Yuseong-gu Daejeon 305-700 Republic of Korea

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled

DATA TRANSCEIVING APPARATUS AND METHOD IN CENTRALIZED MAC-BASED WIRELESS COMMUNICAT

| elating to International Patent Application PC tates was executed on even date herewith o | |
|--|--|
| (a) executed on ; | (Insert date of execution of application, if not concurrent) |
| (b) filed on , | Any registered attorney of STAAS & HALSEY LLP, 1201 New York Avenue, N.W., Suite 700 Washington, D.C. 20005 (202/434-1500) i |
| Serial No. ; | hereby authorized to insert in (b) the specified data, when known. |
| ubstitute, reissue or reexamination application ranted and including any extensions thereof The ASSIGNOR agree(s), when read to all acts which the ASSIGNEE may deem aid invention, including in the preparation are otherference, reissue, reexamination, or publication. | of the United States granted on sald application and any continuation, division, rer based thereon, for the full term or terms for which the said Letters Patent(s) may collectively, hereinafter, "sald application(s) and Letters Patent(s)"). Hested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE and without charge to but at the expense of said ASSIGNEE and without charge to but at the expense of said ASSIGNEE and without charge to but at the expense of said ASSIGNEE and without charge to but at the expense of said ASSIGNEE and without charge to but at the expense of said ASSIGNEE and without charge to but at the expense of said ASSIGNEE and without charge to but at the expense of said ASSIGNEE and ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and ASSIGNEE and Without charge to but at the expense of said ASSIGNEE and ASSIG |
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| eclarations, taking all rightful oaths, providing IN WITNESS WHEREOF, the undersigner (Typed Name & Signature of Inventor(s)) Hyoung Jin KWON Jin Kyeong KIM J. L. M. | swom testimony, and obtaining and producing evidence. nventor(s) has (have) affixed his/her/their signature(s). (Date) (Typed Name & Signature of Witness(es |
| IN WITNESS WHEREOF, the undersigner (Typed Name & Signature of Inventor(s)) Hyoung Jin KWON Jin Kyeong KIM Yong Sun KIM Authoritan July 14 July 1 | swom testimony, and obtaining and producing evidence. nventor(s) has (have) affixed his/her/their signature(s). (Date) (Typed Name & Signature of Witness(es April 14, 2009 April 14, 2009 |

PATENT REEL: 022702 FRAME: 0365