

## 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>KWANGWOON UNIVERSITY RESEARCH INSTITUTE FOR INDUSTRY COOPERATION</td> <td>11/19/2012</td> </tr> <tr> <td>INDUSTRY-ACADEMIA COOPERATION GROUP OF SEJONG UNIVERSITY</td> <td>12/10/2012</td> </tr> </tbody> </table>		Name	Execution Date	KWANGWOON UNIVERSITY RESEARCH INSTITUTE FOR INDUSTRY COOPERATION	11/19/2012	INDUSTRY-ACADEMIA COOPERATION GROUP OF SEJONG UNIVERSITY	12/10/2012
Name	Execution Date						
KWANGWOON UNIVERSITY RESEARCH INSTITUTE FOR INDUSTRY COOPERATION	11/19/2012						
INDUSTRY-ACADEMIA COOPERATION GROUP OF SEJONG UNIVERSITY	12/10/2012						
RECEIVING PARTY DATA							
Name:	ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE						
Street Address:	161 GAJEONG-DONG, YUSEONG-GU						
City:	DAEJEON						
State/Country:	KOREA, REPUBLIC OF						
Postal Code:	305-350						
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>12307408</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12307408		
Property Type	Number						
Application Number:	12307408						
CORRESPONDENCE DATA							
Fax Number:	3124276663						
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>							
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ATTORNEY DOCKET NUMBER:	CU-7245 RJS/DS						
NAME OF SUBMITTER:	RICHARD J. STREIT						
Total Attachments: 2 source=2012-12-17_cu7245_assignment_to_ETRI#page1.tif source=2012-12-17_cu7245_assignment_to_ETRI#page2.tif							

CH \$40.00 12307408

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**UNITED STATES OF AMERICA**  
**ASSIGNMENT**

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In consideration of the payment of ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

**ASSIGNOR:**

**KWANGWOON UNIVERSITY RESEARCH INSTITUTE FOR INDUSTRY  
COOPERATION**  
447-1, Wolgye-dong, Nowon-gu  
Seoul 139-701, Republic of Korea

**INDUSTRY-ACADEMIA COOPERATION GROUP OF SEJONG UNIVERSITY**  
98, Gunja-dong, Gwangjin-gu  
Seoul 143-747, Republic of Korea

hereby sells, assigns and transfers to

**ASSIGNEE:**

**ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE**  
161, Gajeong-dong, Yuseong-gu  
Daejeon 305-350, Republic of Korea

and the successors, assigns and legal representatives of the ASSIGNEE the entire right, title and interest for the United States and its territorial possessions in and to, any and all improvements which are disclosed in the Application entitled

**TITLE OF INVENTION:**

MULTI-DIMENSIONAL AND MULTI-STAGE TRANSFORMING APPARATUS AND  
METHOD

and which is found in (37 CFR 3.21) - *(check applicable item(s) below)*

- (a) Not yet filed U.S. patent application executed on even date herewith
- (b) Not yet filed U.S. patent application executed on \_\_\_\_\_  
*(insert date of execution of Declaration)*

- To comply with 37 CFR 3.21 for recordal of this assignment, I, an ASSIGNOR signing below, hereby authorize and request my attorney to insert below the filing date and application number when they become known.
- (c) U.S. patent or provisional patent application No. 12/307,408 filed on October 7, 2009.
- (d) International application No. \_\_\_\_\_ filed on \_\_\_\_\_

and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, we have set our hand and seal

*Note: The date of signing must be the same as the date of execution of the application if item (a) was checked above.*

Kwangwoon University Research Institute  
For Industry Cooperation

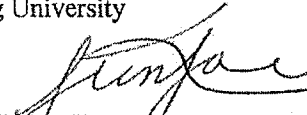


Name: Jin-Joo Choi  
Title: President

November 19, 2012

\_\_\_\_\_  
Date

Industry-Academia Cooperation Group Of  
Sejong University



Name: Sun-Jae Kim  
Title: president

December 10, 2012

\_\_\_\_\_  
Date

*L&P 09/2012 (Assignment - entire interest - US rights only)*

Page 2 of 2