

# PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
<b>CONVEYING PARTY DATA</b>											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>CHIA-LUNG TSAI</td> <td>12/15/2009</td> </tr> <tr> <td>YU-TAO HSIEH</td> <td>12/16/2009</td> </tr> <tr> <td>PANG-AN TING</td> <td>12/15/2009</td> </tr> <tr> <td>JEN-YUAN HSU</td> <td>12/15/2009</td> </tr> </tbody> </table>		Name	Execution Date	CHIA-LUNG TSAI	12/15/2009	YU-TAO HSIEH	12/16/2009	PANG-AN TING	12/15/2009	JEN-YUAN HSU	12/15/2009
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<b>RECEIVING PARTY DATA</b>											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE</td> </tr> <tr> <td>Street Address:</td> <td>No. 195, Sec. 4, Chung Hsing Rd., Chutung</td> </tr> <tr> <td>City:</td> <td>Hsinchu</td> </tr> <tr> <td>State/Country:</td> <td>TAIWAN</td> </tr> <tr> <td>Postal Code:</td> <td>31040</td> </tr> </table>		Name:	INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE	Street Address:	No. 195, Sec. 4, Chung Hsing Rd., Chutung	City:	Hsinchu	State/Country:	TAIWAN	Postal Code:	31040
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<b>PROPERTY NUMBERS Total: 1</b>											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12649028</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12649028						
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<b>CORRESPONDENCE DATA</b>											
<p>Fax Number: (202)408-4400  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 202-408-4000</p> <p>Email: teresa.love@finnegan.com</p> <p>Correspondent Name: FINNEGAN, HENDERSON, FARABOW, GARRETT &amp;        Address Line 1: 901 NEW YORK AVENUE, NW        Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20001-4413</p>											
ATTORNEY DOCKET NUMBER:	06720.0300-00000										
NAME OF SUBMITTER:	Richard Burgujian										
<p>Total Attachments: 2        source=0300ASSIGNMENT#page1.tif</p>											

OP \$40.00 12649028

**501053196**

**PATENT**  
**REEL: 023714 FRAME: 0652**



**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

U.S. Department of Commerce  
Patent and Trademark Office  
Attorney Docket No. 06720.0300

**To the Director of the U.S. Patent and Trademark Office:  
Please record the attached original documents or copy thereof.**

**Mail Stop Assignment Recordation Services**

1. Name of conveying party(ies):  
TSAI, Chia-Lung  
HSIEH, Yu-Tao  
TING, Pang-An  
HSU, Jen-Yuan

2. Name and address of receiving party:  
  
Name: **INDUSTRIAL TECHNOLOGY  
RESEARCH INSTITUTE**

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

Internal Address:

3. Nature of conveyance:

Street Address: **No. 195, Sec. 4, Chung Hsing Rd.,  
Chutung, Hsinchu 31040, Taiwan,  
R.O.C.**

☒ Assignment

☐ Merger

City:

☐ Security Agreement

☐ Change of Name

State: Zip Code:

☐ Joint Research Agreement

☐ Government Interest Assignment

Additional name(s) & Address(es) attached?

☐ Executive Order 9494, Confirmatory License

☐ Other:

☐ Yes ☒ No

Execution Date: 1<sup>st</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> inventors: **December 15, 2009**  
2<sup>nd</sup> inventor: **December 16, 2009**

4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application: **December 15 and 16, 2009**

A. Patent Application Number(s):  
  
Additional numbers attached?

B. Patent Number(s):  
  
☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

6. Total number of applications and patents involved: **1**

Name: **Richard V. Burgujian** (202) 408-4000

7. Total fee (37 CFR 1.21(h) and 3.41): **\$40**

Internal Address: **FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.**

☒ Enclosed (Please charge deficiency or credit overpayment to deposit account 06-0916)

Street Address: **901 New York Avenue, N.W.**

☐ Authorized to be charged to deposit account

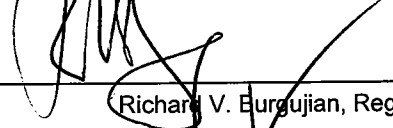
City: **Washington, D.C.**

State: Zip: **20001-4413**

8. Deposit Account No.: **06-0916**

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Signed:  Richard V. Burgujian, Reg. No. 31,744 December 29, 2009  
Date

Total number of pages including cover sheet, attachments and documents: **2**

## ASSIGNMENT

WHEREAS I/We, the below named inventor(s) (hereinafter referred to as Assignor(s)) have made an invention entitled:

### APPARATUSES AND METHODS FOR WIRELESS COMMUNICATIONS USING A PERMUTATION SEQUENCE

for which I/We executed an application for United States Letters Patent concurrently herewith; and

WHEREAS, **Industrial Technology Research Institute**, a corporation of R.O.C. whose post office address is No. 195, Sec. 4, Chung Hsing road, Chufung, Hsinchu, 31040 Taiwan R.O.C., (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, I/We, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my/our entire right, title, and interest in and to this invention, provisional Application No. [Text], filed [Date] (if any), and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of the above provisional application (if any), as well as all rights to claim priority on the basis of this application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I/We hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY covenant that I/We have the full right to convey the interest assigned by this Assignment, and I/We have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me/us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

AND, I/WE HEREBY authorize and request the attorneys I/we have empowered in the Declaration and Power of Attorney in this application, to insert here in parentheses (Application No. \_\_\_\_\_, filed \_\_\_\_\_) the filing date and application number of said application when known.

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

<u>Chia-Lung TSAI</u> FULL NAME OF FIRST INVENTOR	<u>Chia-Lung TSAI</u> INVENTOR'S SIGNATURE	<u>2009.12.15</u> DATE
<u>Yu-Tao HSIEH</u> FULL NAME OF FIRST INVENTOR	<u>Yu-Tao Hsieh</u> INVENTOR'S SIGNATURE	<u>2009.12.16</u> DATE
<u>Pang-An TING</u> FULL NAME OF FIRST INVENTOR	<u>Pang-An Ting</u> INVENTOR'S SIGNATURE	<u>2009.12.15</u> DATE
<u>Jen-Yuan HSU</u> FULL NAME OF FIRST INVENTOR	<u>Jen-Yuan Hsu</u> INVENTOR'S SIGNATURE	<u>2009.12.15</u> DATE