

**PATENT ASSIGNMENT**

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Mitsuru HIRAKAWA	05/11/2010
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SUMITOMO ELECTRIC INDUSTRIES, LTD.
<b>Street Address:</b>	5-33, Kitahama 4-chome, Chuo-ku,
<b>City:</b>	Osaka-shi, Osaka
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	541-0041
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	12741786
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)756-8087
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
<b>Phone:</b>	202-756-8000
<b>Email:</b>	Inguyen@mwe.com
<b>Correspondent Name:</b>	MCDERMOTT WILL & EMERY LLP
<b>Address Line 1:</b>	600 13TH STREET, N.W.
<b>Address Line 4:</b>	WASHINGTON, DISTRICT OF COLUMBIA 20005-3096
<b>ATTORNEY DOCKET NUMBER:</b>	070456-0275
<b>NAME OF SUBMITTER:</b>	Stephen A. Becker, 26,527
<b>Total Attachments: 3</b> source=ASSIGNMENT_070456-0275#page1.tif source=ASSIGNMENT_070456-0275#page2.tif source=ASSIGNMENT_070456-0275#page3.tif	

CH \$40.00 12741786

RECORDATION FORM COVER SHEET

**Docket No.: 070456-0275**

**PATENTS ONLY**

To the Director of the U. S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of Conveying Party(ies)**  
 Mitsuru HIRAKAWA  
 Additional name(s) of conveying party(ies) attached?  Yes  No

**2. Name and address of receiving party(ies)**  
 Name: SUMITOMO ELECTRIC INDUSTRIES, LTD.  
 Internal Address:

**3. Nature of Conveyance/Execution Date(s)**  
 Execution Date(s): May 11, 2010  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Joint Research Agreement  
 Government Interest Assignment  
 Executive Order 9424, Confirmatory License  
 Other

Address: 5-33, Kitahama 4-chome, Chuo-ku, Osaka-shi,  
 Osaka 541-0041 Japan  
 Additional name(s) & address(es) attached?  Yes  No

**4. Application or patent number(s):**  
 A. Patent Application No(s).  
 12/741,786, filed on May 6, 2010

This document is being filed together with a new application.  
 B. Patent No(s).

Additional numbers attached?  Yes  No

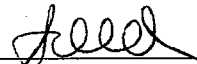
**5. Name and address to whom correspondence concerning document should be mailed:**

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

Name: MCDERMOTT WILL & EMERY LLP  
 Internal Address:  
 Street Address: 600 13th Street, N.W.  
 City: Washington, State: DC Zip: 20005-3096  
 D.C.  
 Phone Number: 202.756.8000  
 Fax Number: 202.756.8087  
 Email Address:

**7. Total fee (37 CFR 1.21(h) & 3.41)** \$40.00  
 Authorized to be charged by credit card  
 Authorized to be charged to deposit account  
 Enclosed  
 None required (government interest not affecting title)

**8. Payment Information:**  
 a. Credit Card Last 4 Numbers \_\_\_\_\_  
 Expiration Date \_\_\_\_\_  
 b. Deposit Account Number 500417  
 Authorized User Name \_\_\_\_\_

**9. Signature.**  
 Stephen A. Becker, 26,527  August 25, 2010

Name and Registration No. of Person Signing \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_  
 Total number of pages including cover sheet, attachments and documents: 3

Attorney Docket No.: 070456-0275

### **ASSIGNMENT**

WHEREAS, Mitsuru HIRAKAWA, hereinafter called the "Assignors," have jointly invented a new and useful invention entitled Radio Communication Device for Performing Communication Using the OFDMA System, for which he has:

- (a) filed an application for United States Letters Patent on May 6, 2010 as (Serial No. 12/741,786); or
- (b) executed an application for United States Letters Patent on \_\_\_\_\_; or
- (c) filed a provisional application on \_\_\_\_\_ as (Serial No. \_\_\_\_\_); and

WHEREAS, Sumitomo Electric Industries, Ltd., a corporation organized and existing under the laws of Japan, having a place of business at: 5-33, Kitahama 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0041 Japan, hereinafter called the "Assignee," is desirous of acquiring the entire right, title and interest in and to said invention, the application above identified, and in, to and under any Letters Patent which may be obtained to said invention, as hereinafter more fully set forth;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for and in consideration of the sum of One Dollar (\$1.00), and other valuable and legally sufficient considerations, the receipt of which by said Assignors from the said Assignee is hereby acknowledged, the said Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignee, the entire, right, title and interest for the United States in and to the invention and application hereinabove identified, and any Letters Patent of the United States that may issue for said invention, together with the entire right, title and interest in and to said invention and applications for Letters Patent and Letters Patent therefor, in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; to have and to hold for the sole and exclusive use and benefit of the said Assignee, its successors and assigns, to the full end of the term or terms for which any and all of said Letters Patent for said inventions may issue.

And the said Assignors do hereby covenant and agree, for himself and his legal representatives, that he will assist the said Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the said Assignee may elect to make covering the invention herein identified, as hereinabove set forth; in vesting in the said Assignee like exclusive title in and to all such other applications and Letters Patent; and in the prosecution of any interference which may arise involving said invention, or any application or Letters Patent herein contemplated; and that they will execute and deliver to the said Assignee any and all additional papers which may be requested by the said Assignee to fully carry out the terms of this Assignment.

The undersigned hereby grant(s) the attorneys of McDermott, Will & Emery LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue Letters Patent to the said Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the said Assignors have hereunto set his hands and affixed his seal.

Date: May 11, 2010 Mitsuru HIRAKAWA (Seal)  
Mitsuru HIRAKAWA

Date: \_\_\_\_\_ (Seal)

Date: \_\_\_\_\_ (Seal)

Date: \_\_\_\_\_ (Seal)

Date: \_\_\_\_\_ (Seal)

Date: \_\_\_\_\_ (Seal)