12-22-05

FORM PTO-1595 (Modified) (Rev. 03-01) OMB No. 0651-0027 (exp.5/31/2002) P08A/REV03

12-27-2005

Docket No.: KAWA-1003US

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

Tab settings → → → ▼ 10314	14404 ▼ ▼		
To the Director of the United States Patent and Trademark Of	fice: Please record the attached original documents or copy thereof.		
1. Name of conveying party(ies): IWANE, Noriyasu WATANABE, Yuichi SUGIMURA, Takezo SATOH, Toshiyuki	Name and address of receiving party(ies):  Name: The Furukawa Electric Co., Ltd.  Address: 6-1, Marunouchi, 2-chome, Chiyoda-ku		
Additional names(s) of conveying party(ies)			
3. Nature of conveyance:			
☑ Assignment ☐ Merger			
☐ Security Agreement ☐ Change of Name	City: Tokyo State/Prov.:		
☐ Other	Country: Japan ZIP: 100-8322		
Execution Date: September 29, 2005	Additional name(s) & address(es)		
<ol> <li>Application number(s) or patent numbers(s):</li> <li>If this document is being filed together with a new application,</li> </ol>			
Patent Application No. Filing date	B. Patent No.(s)		
10/552,674	72 M 7: 26 0E SECTION		
Additional numbers	☐ Yes 🛛 No		
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:		
Name: Ken I. Yoshida	7. Total fee (37 CFR 3.41):\$ 40.00		
Registration No. 37,009	☑ Enclosed - Any excess or insufficiency should be		
Address: Knoble Yoshida & Dunleavy, LLC	credited or debited to deposit account		
Eight Penn Center, Suite 1350	☐ Authorized to be charged to deposit account		
1628 John F. Kennedy Boulevard	8. Deposit account number:		
City: Philadelphia State/Prov.: PA	50-0462		
Country: USA ZIP: 19103	(Attach duplicate copy of this page if paying by deposit account)		
	T USE THIS SPACE		
of the original document.	mation is true and correct and any attached copy is a true copy		
Ken I. Yoshida  Name of Person Signing	December 19, 2005 Signature Date		
	over sheet, attachments, and document:		

## RECORDATION FORM COVER SHEET CONTINUATION PAGE

Continuation of Box 1.

KIMURA, Atsushi IWAHANA, Fumikazu INANIWA, Katsumi KANOU, Tetsuya

> PATENT REEL: 017384 FRAME: 0544

## **ASSIGNMENT**

WHEREAS, we, Noriyasu IWANE, Yuichi WATANABE, Takezo SUGIMURA, Toshiyuki SATOH, Atsushi KIMURA, Fumikazu IWAHANA, Katsumi INANIWA and Tetsuya KANOU, hereinafter referred to as the assignors, residing in Tokyo, Japan are the inventor of certain inventions or improvements for which we have made application for Letters Patent to the United States of America ("United States") by designating the United States in International Patent Application no. PCT/JP2004/009749, identified as Attorney Docket No. KAWA-1003 entitled METHOD AND APPARATUS FOR CALCULATING CHARGED RATE, AND A BATTERY SYSTEM; and

WHEREAS, THE FURUKAWA ELECTRIC CO., LTD., hereinafter referred to as the assignee, of 6-1, Marunouchi, 2-chome, Chiyoda-ku, Tokyo, 100-8322, Japan, a corporation of Japan, is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States:

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to us in hand paid by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements for the United States and said United States patent application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in the United States, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

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PATENT REEL: 017384 FRAME: 0545 AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time a request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and we agree to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisional, continuing and reissue applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in the United States.

AND we hereby authorize and request the Director of Patents and Trademarks of the United States to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

IN WITNESS WHEREOF, we have hereunto set our hand and seal.

Dated: September 29, 2005	Noriyasu I wane	(L. S.)
	Noriyasu IWANE	
Dated:	Zuicho Watananlie	(L. S.)
	Yuichi WATANABE	
Dated: September 29, 2005	Takezo Sugimur.	_ (L. S.)
	Takezo SUGIMURA	
Dated: <u>September 29, 20</u> 05	Toskeychi Sctok	_ (L. S.)
	Toshiyuki SATOH	

Dated:	September	29,	2005	Atsushi Kimura	(L. S.)
Atsushi KIMURA					
Dated:	September	29,	2005	Fumikazy Iwahara	_ (L. S.)
			Fumikazu IWAHANA		
Dated:	September	29,	2005	Katsımi İnanıva	_ (L. S.)
				Katsumi inani wa	
Dated:	September	29,	2005	Tetsuya Kanou	(L. S.)
Tetsuya KANOU					

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## **ASSIGNMENT**

WHEREAS, we, Noriyasu IWANE, Yuichi WATANABE, Takezo SUGIMURA, Toshiyuki SATOH, Atsushi KIMURA, Fumikazu IWAHANA, Katsumi INANIWA and Tetsuya KANOU, hereinafter referred to as the assignors, residing in Tokyo, Japan are the inventor of certain inventions or improvements for which we have made application for Letters Patent to the United States of America ("United States") by designating the United States in International Patent Application no. PCT/JP2004/009749, identified as Attorney Docket No. KAWA-1003 entitled METHOD AND APPARATUS FOR CALCULATING CHARGED RATE, AND A BATTERY SYSTEM; and

WHEREAS, THE FURUKAWA ELECTRIC CO., LTD., hereinafter referred to as the assignee, of 6-1, Marunouchi, 2-chome, Chiyoda-ku, Tokyo, 100-8322, Japan, a corporation of Japan, is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States:

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to us in hand paid by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements for the United States and said United States patent application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in the United States, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

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AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time a request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and we agree to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisional, continuing and reissue applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in the United States.

AND we hereby authorize and request the Director of Patents and Trademarks of the United States to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

IN WITNESS WHEREOF, we have hereunto set our hand and seal.

Dated: September 29, 2005	Noriyasu (Mone Noriyasu IWANE	(L. S.)
Dated: September 29, 2005	Yuichi WATANABE	(L. S.)
Dated: September 29, 2005	Takeyo Sugimus. Takezo SUGIMURA	(L. S.)
Dated: <u>September 29, 20</u> 05	Loshiyaki Satoh Toshiyuki SATOH	_ (L. S.)

**RECORDED: 12/22/2005** 

Dated:	September	29,	2005	<u> </u>	Himura	(L. S.)
Dated:	September	29,			Iwa haret	(L. S.)
Fumikazu IWAHANA						
Dated:	September	29,	2005		Inancior	_ (L. S.)
				Katsumi INANIW	A	
Dated:	September	29,	2005	Tetsuya	Kanou	_ (L. S.)
Tetsuya KANOU						

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PATENT REEL: 017384 FRAME: 0550