

## PATENT ASSIGNMENT

Electronic Version v1.1  
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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>Kenichi MORI</td> <td>05/24/2012</td> </tr> </tbody> </table>		Name	Execution Date	Kenichi MORI	05/24/2012
Name	Execution Date				
Kenichi MORI	05/24/2012				
RECEIVING PARTY DATA					
Name:	SHINKO ELECTRIC INDUSTRIES CO., LTD.				
Street Address:	80, Oshimada-machi, Nagano-shi,				
City:	Nagano				
State/Country:	JAPAN				
Postal Code:	381-2287				
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>13480985</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13480985
Property Type	Number				
Application Number:	13480985				
CORRESPONDENCE DATA					
Fax Number:	(202)797-8188				
Phone:	202 797 4181				
Email:	IPUSA@IPUSAPAT.COM, ips@itohpat.co.jp				
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>					
Correspondent Name:	IPUSA, P.L.L.C				
Address Line 1:	1054 31ST STREET, N.W.				
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ATTORNEY DOCKET NUMBER:	12SD-002				
NAME OF SUBMITTER:	Chris Tanner				
Total Attachments: 3 source=12SD-002AssignmentRecordation#page1.tif source=12SD-002AssignmentRecordation#page2.tif source=12SD-002AssignmentRecordation#page3.tif					

CH \$40.00 13480985

PATENT

### RECORDATION FORM COVER SHEET 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)**

Kenichi MORI

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

**2. Name and address of receiving party(ies)**

Name: SHINKO ELECTRIC INDUSTRIES CO., LTD.

Internal Address: \_\_\_\_\_

Street Address: 80, Gshlmada-machi, Nagano-shi,

City: Nagano

State: \_\_\_\_\_

Country: Japan Zip: 381-2287

Additional name(s) & address(es) attached?  Yes  No

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) May 24, 2012

- Assignment  Merger  
 Security Agreement  Change of Name  
 Joint Research Agreement  
 Government Interest Assignment  
 Executive Order 9424, Confirmatory License  
 Other \_\_\_\_\_

**4. Application or patent number(s):**

This document is being filed together with a new application.

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached?  Yes  No

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

Name: IPUSA, PLLC

Internal Address: \_\_\_\_\_

Street Address: 1054 31st Street, N.W., Suite 400

City: Washington

State: DC Zip: 20007

Phone Number: 202-797-4181

Fax Number: 202-797-8188

Email Address: ipusa@ipusapat.com

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

**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 50-4424

Authorized User Name Christopher M. Tanner

**9. Signature:**

CM Tanner

Signature

May 25, 2012

Date

Christopher M. Tanner  
Name of Person Signing

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

**3**

**ASSIGNMENT**

**THIS ASSIGNMENT**, by Kenichi MORI (hereinafter referred to as "Assignor"), residing at Nagano-shi, Nagano, Japan:

**WHEREAS**, Assignor has invented certain new and useful improvements in

WIRING SUBSTRATE AND METHOD FOR MANUFACTURING WIRING SUBSTRATE, set forth in a patent application for Letters Patent of the United States, executed concurrently herewith; and

**WHEREAS**, SHINKO ELECTRIC INDUSTRIES CO., LTD. (hereinafter referred to as "Assignee"), having offices at 80, Oshimada-machi, Nagano-shi, Nagano 381-2287 Japan, is desirous of acquiring the entire right, title and interest in and to said inventions and said application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefor and thereon;

**NOW, THEREFORE**, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignor has sold, assigned, transferred and set over, and by these presents does sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuation-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and Assignment not been made;

**AND** for the same consideration, Assignor hereby represents and warrants to Assignee, its successors legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles, and or interests that have arisen to Assignee under the law or that have already been transferred to Assignee, Assignor is the sole and lawful owner of the entire right, title and interest in and to said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner herein set forth;

**AND** for the same consideration, Assignor hereby covenants and agrees to and with Assignee, its successors, legal representatives and assigns, that Assignor will sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its

successors, legal representatives, and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns shall advise; that any proceeding in connection with said inventions, or said patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable;

AND Assignor hereby requests that the Director of the United States Patent and Trademark Office issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the said Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns;

AND Assignor hereby grants the following individuals 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: All practitioners associated with the Customer Number 77464.

AND Assignor acknowledges an obligation of assignment of this invention to Assignee at the time the invention was made.

May 24, 2012  
Date

Kenichi MORI  
Kenichi MORI