

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5584369

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KENICHI MORI	05/29/2019
YOSHIHIRO KITA	05/30/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SHINKO ELECTRIC INDUSTRIES CO., LTD.
<b>Street Address:</b>	80, OSHIMADA-MACHI
<b>City:</b>	NAGANO-SHI, NAGANO
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	381-2287
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16448205
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(216)566-9711
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	2165669700
<b>Email:</b>	shea@rankinhill.com
<b>Correspondent Name:</b>	RANKIN HILL & CLARK, LLP
<b>Address Line 1:</b>	38210 GLENN AVENUE
<b>Address Line 4:</b>	WILLOUGHBY, OHIO 44094
<b>ATTORNEY DOCKET NUMBER:</b>	HKY-45898
<b>NAME OF SUBMITTER:</b>	SAMIR S. KHOURY
<b>SIGNATURE:</b>	/Samir S. Khoury/
<b>DATE SIGNED:</b>	06/21/2019
<b>Total Attachments: 2</b>	
source=45898-Assignment#page1.tif	
source=45898-Assignment#page2.tif	

## ASSIGNMENT

WHEREAS, new and useful improvements have been made by the undersigned in

### WIRING SUBSTRATE

that are the subject of an application for a U.S. Patent, (Application No. 16/448205, filed June 21, 2019), which application is further identified as Rankin, Hill & Clark LLP Docket No. HKY-45898.

WHEREAS, SHINKO ELECTRIC INDUSTRIES CO., LTD., a corporation of Japan, and having a place of business at 80, Oshimada-machi, Nagano-shi, Nagano, 381-2287 Japan, hereinafter referred to as "assignee", is desirous of acquiring all right, title, and interest throughout the world in, to, and under said improvements and inventions and patent rights therefor.

NOW, THEREFORE, be it known that, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, all right, title, and interest, in the United States and throughout the world, in, to and under said improvements and inventions and all patents, patent applications, patent rights, and inventor's certificates thereof, therefor, and therein, including without limitation said application for patent in the United States, all divisions and continuations thereof, all patents which may be granted thereon, all reissues and extensions thereof, all right to sue for past infringement thereunder, all patents which may be granted for said improvements and inventions by states or nations other than the United States, or by other authority, entity, or organization, and all applications therefor, have been and are hereby sold, assigned, transferred, and delivered unto assignee, its successors and assigns; and it is covenanted and agreed by the undersigned, and for executors, administrators, and legal representatives of the undersigned, that at assignee's request any and all applications, affidavits, assignments, and other instruments will be made, executed, and delivered as may be necessary, or desirable to secure for or vest in assignee, its successors or assigns, any improvement, inventions, right, title, interest, application, patent, patent right or other right or property covered by this assignment, and the United States Commissioner of Patents and Trademarks is hereby requested and authorized to issue any and all United States patents granted on any of said applications to assignee as owner of the entire right, title, and interest in, to, and under the same, and appropriately empowered officials of foreign countries are hereby authorized to issue any letters patent granted on any of said applications to assignee as owner of the entire right, title and interest in, to, and under the same.

The undersigned hereby grants the firm of Rankin, Hill & Clark LLP the power to insert on this assignment any identification that 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.

IN WITNESS WHEREOF, this assignment has been executed below by the undersigned:

(1) Inventor Name (sole or joint): Kenichi MORI

Signature: Kenichi MORI

Today's Date : May 29, 2019

Witness: \_\_\_\_\_

Witness: \_\_\_\_\_

(2) Inventor Name (joint): Yoshihiro KITA

Signature: Yoshihiro KITA

Today's Date : May 30, 2019

Witness: \_\_\_\_\_

Witness: \_\_\_\_\_

(3) Inventor Name (joint): \_\_\_\_\_

Signature: \_\_\_\_\_

Today's Date : \_\_\_\_\_

Witness: \_\_\_\_\_

Witness: \_\_\_\_\_

(4) Inventor Name (joint): \_\_\_\_\_

Signature: \_\_\_\_\_

Today's Date : \_\_\_\_\_

Witness: \_\_\_\_\_

Witness: \_\_\_\_\_