12-02-1999	Express Mail No. <u>EL 394 217 713 US</u>		
m207 H-22.99 101212763	. SHEET <i>l</i> Attorney Docket Number <u>7565-071-999</u>		
TO THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS Box Assignment Washington, DC 20231 Please record the attached original documents or copy thereof.			
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):		
<ul> <li>Shigetsugu Muramatsu, Yoshihiko Ogawa, Norio Kojima</li> <li>Additional name(s) of conveying party(ies) attached?  <ul> <li>Yes</li> <li>No</li> </ul> </li> <li>3. Nature of conveyance: <ul> <li>Assignment</li> <li>Merger</li> <li>Security Agreement</li> <li>Change of Name</li> <li>Other</li> <li>Execution Date: <u>November 15, 1999</u></li> </ul> </li> <li>4. Application number(s) or patent number(s):</li> </ul>	Name:       Shinko Electric Industries Co., Ltd.         Address:       711, Aza Shariden, Oaza Kurita, Nagano         380-0921		
	1. 1. 1. 1. N. 1. 15 1000		
E this document is being filed together with a new application, the execution A. Patent Application No.(s)	B. Patent No.(s) $O9/U4442$ ttached? $\Box$ Yes $\boxtimes$ No		
5. Name and address of party to whom correspondence	6. Number of applications		
concerning document should be mailed: PENNIE & EDMONDS LLP 1155 Avenue of the Americas New York, NY 10036	and patents involved:       1         7. Total fee (37 CFR 3.41):\$ 40.00         Please charge to the deposit account listed in Section 8.         8. Deposit account number:		
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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.         Allan A. Fanucci       30,256         Name of Person Signing Reg. No.       Signature         Total number of pages including cover sheet:       2			
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PATENT REEL: 010403 FRAME: 0014

## U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter "ASSIGNOR") by

(Insert ASSIGNEE's Name(s) Address(es))

SHINKO ELECTRIC INDUSTRIES CO., LTD.

711, Aza Shariden, Oaza Kurita, Nagano-shi, Nagano 380-0921, Japan

(hereinafter "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled

METAL FOIL HAVING BUMPS, CIRCUIT SUBSTRATE HAVING THE METAL FOIL, AND

(Title of Invention)

oť oľ if r con

(Bignatures)

SEMICONDUCTOR DEVICE HAVING THE CIRCUIT SUBSTRATE

relating to International Patent Application PCI/JP and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(Insert date of execution	(a) executed on;	(
of application,	(b) filed on,	) is hereby authorized to insert in (b) the specified
if not concurrent)	Serial No;	data, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

- Tangtongh / www.tac	Chicotowa Manage	Newsyle 15 1000
12	Shigetsugu Muramatsu	
(SIGNATURE)	(TYPE NAME)	(DATE)
2) Colorido, aganos (SIGNATURE)	Yoshihiko Ogawa (TYPE NAME)	November: 15, 1999 (DATE)
	<b>,</b>	(,
3 Merico Erros	Norio Kojima	November 15, 1999
(SIGNATURE)	(TYPE NAME)	(DATE)
4)(SIGNATURE)	(TYPE NAME)	(DATE)
5)(SIGNATURE)	(TYPE NAME)	(DATE)
6)	(TYPE NAME)	(DATE)
7)(SIGNATURE)	(type name)	(DATE)
8)(SIGNATURE)	(TYPE NAME)	(DATE)

PATENT REEL: 010403 FRAME: 0015

**RECORDED: 11/22/1999**