504554695 09/19/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4601404

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TOMOTSUGU SHIRATORI	09/05/2017
SHINICHI JINGAMA	09/13/2017

RECEIVING PARTY DATA

Name:	FURUKAWA ELECTRIC CO., LTD.		
Street Address:	2-3, MARUNOUCHI 2-CHOME		
Internal Address:	CHIYODA-KU		
City:	TOKYO		
State/Country:	JAPAN		
Postal Code:	100-8322		
Name:	FURUKAWA AUTOMOTIVE SYSTEMS INC.		
Street Address:	1000, AMAGO		
Internal Address:	KOURA-CHO		
City:	INUKAMI-GUN, SHIGA		
State/Country:	JAPAN		
Postal Code:	522-0242		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14555974

CORRESPONDENCE DATA

Fax Number: (703)413-2220

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.

Phone: (703) 413-3000
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Correspondent Name: OBLON, ET AL.
Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER: 444971US

NAME OF SUBMITTER: JUNG-YON KIM

PATENT 504554695 REEL: 043630 FRAME: 0418

SIGNATURE:	/Jung-Yon Kim/
DATE SIGNED:	09/19/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 0	

Total Attachments: 2

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> PATENT REEL: 043630 FRAME: 0419

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR MULTIPLE ASSIGNEES

Title of Invention	METAL CORE SUBSTRATE CORE PLATE USABLE FOR	, METHOD FOR PRODUCING THE SAME, AND THE SAME
As the below name	d inventor, I hereby declare that:	
This declaration [The attached application, or	
is directed to:	United States application or PCT filed on November 28, 2014	nternational application number 14/555,974
The above-identific	ed application was made or authorize	d to be made by me.
I believe that I am	the original inventor or an original je	int inventor of a claimed invention in the application.
(hereinafter referre Tokyo Japan 100-8 of jointly acquiring	d to as "ASSIGNEES") having place (322 (2) 1000, Amago, Koura-cho, I g interests in the entire right, title a	D. (2) FURUKAWA AUTOMOTIVE SYSTEMS INC. es of business at: 1) 2-3, Marunouchi 2-chome, Chiyoda-ku, bukami-gun, Shiga Japan 522-0242, respectively are desirous and interest in and to said invention and in and to any Letters ates and its territorial possessions and in any and all foreign
acknowledged, and said ASSIGNEES, and in all foreign of other relevant inte interest in and to	d for other good and valuable consi- the full and exclusive right to the se countries (including the right to clair rnational Treaties and Arrangement any and all Letters Patent which me any and all foreign countries as	of FIVE DOLLARS (\$5.00), the receipt whereof is hereby feration, I, by these presents do sell, assign and transfer unto id invention in the United States and its territorial possessions a priority under the terms of the International Convention and from the aforesaid application) and the entire right, title and ay be granted therefor in the United States and its territorial id in and to any and all divisions, reissues, continuations,
any and all foreign assignees of my e their successors ar	n countries to issue any and all of some intire right, title and interest in and to ad assigns, to the full end of the ter	ficials in the United States and its territorial possessions and aid Letters Patent, when granted, to said ASSIGNEES as the o the same, for the sole use and behoof of said ASSIGNEES, n for which said Letters Patent may be granted, as fully and his Assignment and sale not been made.
respecting said in continuation, subs- all of said Letters possible to aid sa	rvention, and testify in any legal titute, renewal and reissue application. Patent to be issued to said ASSIG id ASSIGNEES, their successors a	ASSIGNEES or their tepresentatives any facts known to me proceeding, sign all lawful papers, execute all divisional, and, execute all necessary assignment papers to cause any and NEES, make all rightful oaths, and, generally do everything ad assigns, to obtain and enforce proper protection for said ions and in any and all foreign countries.
	wledge that any willful false stateme nment of not more than five (5) year	nt made in this declaration is punishable under 18 U.S.C. 1001, or both.
LEGAL NAME O	FINVENTOR	
Inventor: Tomot	sugu SHIRATORI	Date: 2017 / 9 / 5
Signature: Ton	nutsugu Shiratori	

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

> PATENT REEL: 043630 FRAME: 0420

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR MULTIPLE ASSIGNEES

METAL CORE SUBSTRATE, METHOD FOR PRODUCING THE SAME, AND

Invention CORE PLATE USABLE FOR THE SAME		
As the below named inventor, I hereby declare that:		
This declaration The attached application, or		
is directed to: United States application or PCT international application number 14/555,974 filed on November 28, 2014		
The above-identified application was made or authorized to be made by me.		
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.		
WHEREAS, (1) FURUKAWA ELECTRIC CO., LTD. (2) FURUKAWA AUTOMOTIVE SYSTEMS INC. (hereinafter referred to as "ASSIGNEES") having places of business at: 1) 2-3, Marunouchi 2-chome, Chiyoda-ki Tokyo Japan 100-8322 (2) 1000, Amago, Koura-cho, Inukami-gun, Shiga Japan 522-0242, respectively are desirou of jointly acquiring interests in the entire right, title and interest in and to said invention and in and to any Letter Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreig countries;	is rs	
NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is herebacknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unisaid ASSIGNEES, the full and exclusive right to the said invention in the United States and its territorial possession and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title an interest in and to any and all Letters Patent which may be granted therefor in the United States and its territoric possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuation substitutions and renewals thereof.	to is id id al	
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions an any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEES as the assignees of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEES their successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully an entirely as the same would have been held by me had this Assignment and sale not been made.	ne S,	
Further, I agree that I will communicate to said ASSIGNEES or their representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any anall of said Letters Patent to be issued to said ASSIGNEES, make all rightful oaths, and, generally do everythin possible to aid said ASSIGNEES, their successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.	ıl, ıd ıg	
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 100 by fine or imprisonment of not more than five (5) years, or both.	1	
LEGAL NAME OF INVENTOR		
Inventor: Shinichi JINGAMA Date: 9/13/2017 Signature: MMMMMx Maxama		
Signature: MWWW (Informa		

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

> PATENT REEL: 043630 FRAME: 0421

RECORDED: 09/19/2017

Title of