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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TAIJI MITSUYAMA	09/17/2018
ETSUZO SATO	09/07/2018
NORIYASU IWANE	09/07/2018
NAOTAKA UCHINO	09/07/2018
HIROKAZU NARUI	09/18/2018
AKIRA OONO	09/07/2018
TAKAYUKI MORIKAWA	09/27/2018

RECEIVING PARTY DATA

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16145007

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	MP160428US/FRKWP205WOUS
NAME OF SUBMITTER:	THOMAS E. WATSON
SIGNATURE:	/Thomas E. Watson/
DATE SIGNED:	09/27/2018
Total Attachments: 9	
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We, Taiji MITSUYAMA, Etsuzo SATO, Noriyasu IWANE, Naotaka UCHINO, Hirokazu NARUI, Akira OONO, and Takayuki MORIKAWA, ("ASSIGNORS"), have invented subject matter ("INVENTION") entitled "DEVICE FOR ESTIMATING DEGRADATION OF SECONDARY CELL, AND METHOD FOR ESTIMATING DEGRADATION OF SECONDARY CELL", disclosed and/or claimed in PCT patent application no. PCT/JP2017/012776, filed March 28, 2017, which INVENTION:

\boxtimes	will also be filed in the United States Patent & Trademark Office as a United
	States patent application ("US APPLICATION") without this executed PATENT
	ASSIGNMENT. ASSIGNORS hereby authorize, and request, ASSIGNEES' legal
	representatives of Amin, Turocy & Watson, LLP, 127 Public Square, 57th
	Floor, Key Tower, Cleveland, Ohio 44114, who are associated with
	customer number 23623, to insert here in parentheses
	(Application No. <u>16/145,007</u> filed <u>09/27/2018</u>) this US
	APPLICATION's Application No. and filing date, when known;
	was filed in the United States Patent & Trademark Office on
	and was given U.S. Patent Application Serial No;
	is filed concurrently herewith;

FURUKAWA ELECTRIC CO., LTD., a Japanese corporation, having a principal place of business at 2-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 1008322, Japan, on behalf of itself and its successors and assigns, and

FURUKAWA AUTOMOTIVE SYSTEMS INC., a Japanese corporation, having a principal place of business at 1000, Amago, Koura-cho, Inukami-gun, Shiga 5220242, Japan, on behalf of itself and its successors and assigns ("ASSIGNEES"),

are entitled to, and are desirous of acquiring, the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNORS, the ASSIGNORS hereby sell, assign and transfer to the ASSIGNEES, the entire and exclusive rights, title and interest in the INVENTION and the APPLICATION (and APPLICATION DERIVATIVES);

ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of the APPLICATION (and APPLICATION DERIVATIVES), for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION (and APPLICATION DERIVATIVES).

Mitsujames Jaiji	Sep 17, 2018
Inventor's Signature	Date
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Etsino Soto	Sep. 7th, 248
Inventor ⁹ s Signature	Date
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Noriyasu Swane	San 7th 2018
Inventor's Signature	Sep. 74h , 2018 Date
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Noriyasu IWANE Printed Name in English	Printed Name in Native Language (if
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haotaka Uchino	Sep. 7th, 2018
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Naotaka UCHINO	Sep. 1th, 2018
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Inventor's Signature	Date
inventor a signature	Date
Takayuki MORIKAWA	
Printed Name in English	Printed Name in Native Language (if other than English)

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Page 1 of 3

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nventor's Signature	Date
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Noriyasu IWANE Printed Name in English	Printed Name in Native Language (if other than English)
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Page 2 of 3

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Inventor's Signature	Date
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Akira OONO	
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Inventor's Signature	Date
Takayuki MORIKAWA	
Printed Name in English	Printed Name in Native Language (if other than English)

PATENT ASSIGNMENT

Client Docket No. MP160428US OC Docket No. FRKWP205WOUS

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Voriyasu IWANE	
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nventor's Signature	Date
Jaotaka UCHINO	
Printed Name in English	Printed Name in Native Language (if

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Inventor's Signature	 Date
Hirokazu NARUI	
Printed Name in English	Printed Name in Native Language (if other than English)
Inventor's Signature	Date
inventor a signature	Date
Akira OONO	
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Jokayuki' Monikawa Inventor's Signature	09/27/2018
Inventor's Signature	Date
Takayuki MORIKAWA	
Printed Name in English	Printed Name in Native Language (if other than English)

PATENT REEL: 047000 FRAME: 0332

RECORDED: 09/27/2018