502984117 09/19/2014

PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUEHU PU	08/11/2014
MASAHIRO IKEDA	08/19/2014
TAIZO HONDA	08/19/2014

RECEIVING PARTY DATA

Name: MITSUBISHI ELECTRIC CORPORATION					
Street Address:	7-3, MARUNOUCHI 2-CHOME				
City:	CHIYODA-KU, TOKYO				
State/Country:	JAPAN				
Postal Code:	100-8310				

PROPERTY NUMBERS Total: 1

Property Type	Number				
Application Number:	14386626				

CORRESPONDENCE DATA

Fax Number: (703)836-7419

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: 7038366620

Email: beverly.caraway@bipc.com

BUCHANAN INGERSOLL & ROONEY P.C. **Correspondent Name:**

Address Line 1: P.O. BOX 1404

Address Line 4: ALEXANDRIA, VIRGINIA 22313-1404

ATTORNEY DOCKET NUMBER:	1033318-000370			
NAME OF SUBMITTER:	BEVERLY A. CARAWAY			
SIGNATURE:	/BACaraway/			
DATE SIGNED:	09/19/2014			

Total Attachments: 2 source=ASG#page1.tif source=ASG#page2.tif

> **PATENT REEL: 033780 FRAME: 0556** 502984117

Attorney Docket No	,
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ASSIGNMENT (JOINT)

THIS ASSIGNMENT, by Yuehu PU, Masahiro IKEDA and Taizo HONDA, residing at o/o Mitaubishi Electric Corporation, 7-3, Marunouchi 2-chome, Chivoda-ku, TOKYO 100-8310 JAPAN (hereinafter referred to as "the Assignors"), respectively, witnesseth:

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	(1)	r	no l	vision	al apo	olicat	ion										

(1)		prov	isional application
	(a)		bearing Application No, and filed on;
	(b)		to be filed herewith; or
(2)	\boxtimes	non-	provisional application
	(a)	\boxtimes	bearing Application No.PCT/JP2012/057182, and filed on March 21, 2012
	(b)		having an oath or declaration executed on even date herewith prior to filling of application;
	(c)		having an oath or declaration executed on a different date than this Assignment; and

WHEREAS, <u>Mitsubishi Electric Corporation</u>, a corporation duty organized under and pursuant to the laws of <u>JAPAN</u> and having a principal place of business at <u>7-3</u>, <u>Marunouchi 2-chome</u>, <u>Chivodaku, TOKYO 100-8310 JAPAN</u> (hereinefter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, 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 behoof and the use and behoof of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made:

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignes, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever

Buchanan Ingersoll & Rooney rc

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Application	No.	a.v.aaaaaaaaaaaaaaaaa
Attorney Docket	No.	CONTRACTOR

counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, 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 Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Buchanan Ingersoil & Rooney PC to insert in the spaces provided above the title of the invention, filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behoof of the Assignee, its successors, legal representatives, and assigns.

DATE August 11, 2014	Yueha Pu
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DATE Aug 19,2014	Masahiro Ixeda
The state of the s	Masahiro IKEDA
DATE Aug 19, 2014	TaTzo Honda
	Taizo HONDA

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