PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
Akihiko FURUKAWA	12/18/2012	
Yasuhiro KAGAWA	12/21/2012	
Naruhisa MIURA	12/21/2012	
Shiro HINO	12/21/2012	
Shuhei NAKATA	12/20/2012	
Kenichi OHTSUKA	12/20/2012	
Shoyu WATANABE	12/26/2012	
Masayuki IMAIZUMI	12/20/2012	

RECEIVING PARTY DATA

Name:	Mitsubishi Electric Corporation	
Street Address:	7-3, Marunouchi 2-chome, Chiyoda-ku	
City:	Tokyo	
State/Country:	JAPAN	
Postal Code:	100-8310	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13806534

CORRESPONDENCE DATA

Fax Number: 7034132220

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: (703) 413-3000
Email: davila@oblon.com
Correspondent Name: Oblon, Spivak, et al.
Address Line 1: 1940 Duke Street

Address Line 4: Alexandria, VIRGINIA 22314

ATTORNEY DOCKET NUMBER: 408810US2PCT

502258270 PATENT REEL: 029948 FRAME: 0180

DP \$40.00 138065

NAME OF SUBMITTER:	David Avila
Total Attachments: 2 source=408810USassignment#page1.tif source=408810USassignment#page2.tif	

PATENT REEL: 029948 FRAME: 0181

Assignment of Application

INSTERT HAMES
AND RESIDENCE
ADDRESS OF

WHEREAS, I (WI	E) 1) Akihiko FURUKAWA			
	2) Yasuhiro KAGAWA			
	3) Naruhisa MIURA			-
	4) Shiro HINO	······	· · · · · · · · · · · · · · · · · · ·	. <u>.</u>
	5) Shuhei NAKATA			
	6) Kenichi OHTSUKA			
	7) Shoyu WATANABE			
	8) Masayuki IMAIZUMI			
	all of: c/o Mitsubishi Elect	ric Corporation,	7-3, Marunouchi 2-chome, Chiyoda-ku	, Tokyo
	100-8310, Japan			
	<u> </u>			
		_		_, respective
				_,
have invented cert	tain new and useful improveme	ents in: POWER	SEMICONDUCTOR DEVICE	
(Application No.	13/806,534	, filed _	December 21, 2012), and
				 -
WHEREAS,	Mitsubishi Electric Corporation	DII		

(hereinafter referred to as "ASSIGNEE") having a place of business at: 7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8310, Japan is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions 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(s)) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues. continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

07/09

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) 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 and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) 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.

The undersigned hereby grant(s) the firm of Oblon, Spivak, McClelland, Maier & Neustadt, L.L.P. of 1940 Duke Street, Alexandria, Virginia 22314 the power to insert on this assignment any further identification, including the application number and filing date, which 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.

Date: Desember 18, 2012	Akihiko Funikawa (Sienahura of Inventor) Akihiko Eurok IV. A SUA
Date: December 21, 2012	(Signature of Inventor) Akihiko FURUKAWA
Date: December 21, 2012	Naruhisa Miura
Date: December 21, 2012	(Signature of Inventor) Naruhisa MIURA
Date: <u>Decamber</u> 20, 2012	(Signature of Inventor) Shiro HINO Shulli Nuhate
Date: De combon 20, 2012	(Signature of Inventor) Shuhei NAKATA Ken i Li Uhtanka
Date: <u>December</u> 26, 2012	(Signature of Inventor) Kenichi OHTSUKA S.hoyu Watanabe (Signature of Inventor) Shoyu WATANABE
Date: Documber 20, 2012	(Signature of Inventor) Shoyu WATANABE Macayahi luaizumi (Signature of Inventor) Masayuki IMAIZUMI

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

07/09

RECORDED: 03/08/2013

PATENT REEL: 029948 FRAME: 0183