PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3104551

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HITACHI, LTD.	08/06/2013

RECEIVING PARTY DATA

Name:	HITACHI POWER SEMICONDUCTOR DEVICE, LTD.	
Street Address:	2-2, OMIKA-CHO 5-CHOME, HITACHI-SHI	
City:	IBARAKI	
State/Country:	JAPAN	

PROPERTY NUMBERS Total: 42

Property Type	Number
Patent Number:	7692299
Patent Number:	7230283
Patent Number:	7335928
Patent Number:	7619385
Patent Number:	7560896
Patent Number:	7821223
Patent Number:	7839113
Patent Number:	8035330
Patent Number:	7859210
Patent Number:	8421395
Patent Number:	7675727
Patent Number:	7224133
Patent Number:	7336118
Patent Number:	7564294
Patent Number:	7388341
Patent Number:	7342378
Patent Number:	7586467
Patent Number:	8004075
Patent Number:	8125090
Patent Number:	7710064
Patent Number:	7982266
Patent Number:	7928587
50305/949	

PATENT

50305/949 REEL: 034153 FRAME: 0954

Property Type	Number
Patent Number:	8115436
Patent Number:	8472188
Patent Number:	8436563
Patent Number:	8546847
Patent Number:	8564953
Patent Number:	8531148
Patent Number:	5898199
Patent Number:	6198126
Patent Number:	7423349
Patent Number:	7964492
Patent Number:	8421232
Patent Number:	5956231
Patent Number:	6040827
Patent Number:	6288597
Patent Number:	7295412
Patent Number:	5691553
Patent Number:	5859446
Patent Number:	6313598
Patent Number:	6331730
Patent Number:	5973777

CORRESPONDENCE DATA

Fax Number: (703)739-2815

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.

Email: iprecordals@cpaglobal.com, alvins@cpaglobal.com

Correspondent Name: CPA GLOBAL LIMITED
Address Line 1: LIBERATION HOUSE
Address Line 2: CASTLE STREET

Address Line 4: ST HELIER, JERSEY JE1 1BL

NAME OF SUBMITTER:	HELEN BIRRELL
SIGNATURE:	/H/BIRRELL/IPR/AS/NGBHITACHIAG42PT/
DATE SIGNED:	11/12/2014

Total Attachments: 3

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> PATENT REEL: 034153 FRAME: 0955

INTERSTER OF AMERICA

ASSIGNMENT

WHEREAS, Hitachi, Ltd. ("ASSIGNOR"), a company organized under the laws of Japan, with a place of business at 6-6, Marunouchi 1-chome, Chiyoda-ku, Tokyo, Japan, owns the United States Patent(s) (the "Patent(s)") listed on the attached Schedule A; and

WHEREAS, Hitachi Power Semiconductor Device, Ltd. ("ASSIGNEE"), a company organized under the laws of Japan, with a place of business at 2-2, Omika-cho 5-chome, Hitachi-shi, Ibaraki, Japan, desires to acquire all rights to the Patent(s);

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other valuable consideration, the receipt of which ASSIGNOR acknowledges, ASSIGNOR has sold, assigned, transferred, and set over, and does, by this Assignment, sell, assign, transfer, and set over unto ASSIGNEE, all rights to the Patent(s), including reissues and extensions, to be held and enjoyed by ASSIGNEE, its successors, assigns, and legal representatives, for ASSIGNEE's own use and benefit and for the use and benefit of its successors, assigns, and legal representatives, to the end of the term(s) for which the Patent(s) has/have been granted or may be reissued or extended, as fully and entirely as the Patent(s) would have been held and enjoyed by ASSIGNOR had this assignment and sale not been made; together with all claims for profits and damages by reason of past infringement, with the right to sue for and collect the same for the use and benefit of ASSIGNEE, its successors, assigns, and legal representatives.

This Assignment is deemed to have become effective as from August 6, 2013

IN WITNESS WHEREOF, ASSIGNOR has caused this Assignment to be executed by its duly authorized officer or representative on the date indicated below.

[Hitachi, Ltd.]

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Name: Takashi SUZUKI

Title: Corporate Officer, General Manager, Intellectual Property Division

(Authorized Signing Officer)

Date: 19, 2019

[Hitachi Power Semiconductor Device, Ltd.]

Name: Mitsuru KOSAKA

Title: General Manager, Business Planning Division

Date: September 17. 2014

PATENT REEL: 034153 FRAME: 0956

<u>Schedule</u>

Country	Application Number	IP Grant Number
USA	P11/834734	P7692299
USA	PCPA1/08/53 9075	P05956231
USA	P08/890994	P06040827
USA	P09/416650	P06288597
USA	P11/138298	P07230283
USA	P11/802810	P07335928
USA	P11/494601	P7619385
USA	P11/679271	P7560896
USA	P11/769802	P7821223
USA	P12/019736	P7839113
USA	P12/897880	P8035330
USA	P12/024145	P7859210
USA	P12/420154	P8421395
USA	P10/773283	P07295412
USA	P11/979874	P7675727
USA	P11/057615	P07224133
USA	P11/191023	P07336118
USA	P11/962608	P7564294
USA	P11/205907	P07388341
USA	P11/505320	P07342378

PATENT REEL: 034153 FRAME: 0957



Country	Application Number	IP Grant Number
USA	P11/434913	P7586467
USA	P11/739122	P8004075
USA	P12/843934	P8125090
USA	P11/751747	P7710064
USA	P11/684032	P7982266
USA	P12/105553	P7928587
USA	P12/255693	P8115436
USA	P12/707207	P8472188
USA	P12/827736	P8436563
USA	P12/958894	P8546847
USA	P13/013987	P8564953
USA	P13/171626	P8531148
USA	P08/530540	P05691553
USA	P08/892896	P5898199
USA	P09/190617	P6198126
USA	P08/802882	P05859446
USA	P09/463591	P06313598
USA	P09/296466	P06331730
USA	P08/880543	P05973777
USA	P11/412090	P07423349
USA	P12/232676	P7964492
USA	P13/117544	P8421232

PATENT REEL: 034153 FRAME: 0958

RECORDED: 11/12/2014