503708290 02/24/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT3754931 Stylesheet Version v1.2

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TAKUYA ISHII	01/14/2016
ATSUSHI KITAGAWA	01/14/2016
TADATA HATANAKA	01/14/2016

RECEIVING PARTY DATA

Name:	PANASONIC INTELLECTUAL PROPERTY MANAGEMENT CO., LTD.
Street Address:	1-61, SHIROMI 2-CHOME, CHUO-KU, OSAKA-SHI
City:	OSAKA
State/Country:	JAPAN
Postal Code:	540-6207

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15013426

CORRESPONDENCE DATA

Fax Number:

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: kunou.yoshie@kk.jp.panasonic.com

Correspondent Name: PANASONIC IP MANAGEMENT CO., LTD.

Address Line 1: 7F OBP PANASONIC TOWER

Address Line 2: 1-61, SHIROMI 2-CHOME, CHUO-KU

Address Line 4: OSAKA, JAPAN 540-6207

ATTORNEY DOCKET NUMBER: P665690-02

NAME OF SUBMITTER: SHIGERU HONOKI

SIGNATURE: /Shigeru HONOKI/

DATE SIGNED: 02/24/2016

Total Attachments: 2

source=Assignment 15013426(P665690-02 McDer)#page1.tif source=Assignment 15013426(P665690-02 McDer)#page2.tif

PATENT 503708290 REEL: 037819 FRAME: 0686

				Α	Assignment Form 3.0 (Oct. 2008
Pana	sonic Ref*: <u>P665690-02</u>		Application S	erial No /Ś	1013426
Japa	n Firm Name: <u>MAEDA & PARTNE</u>	<u> </u>		Firm Ref: <u>M1</u>	
US F	irm Name*: <u>MWE</u>				14-032031-KI
(- muss	be filled)		00 1 (())		
		ASSIG	NMENT		
WHE	REAS, the undersigned has (have) invent				
DUX 1	of Invention:				
	DC CONVERTER MODULI	=			
	1. For use when signi	ng Declaration prior to filing	J.S. patent application (c	heck only one boy I	helowl
(a) ■	for which an application for U.S. pate	ent has been executed	by the undersigner	d concurrently	herewith, or
(b)□ f	or which an application for U.S. pate	nt has been everyfod	a a 4b a 4-11.		
(4)	for which an International Application	n hae been filed on			he date(s) on which you signed the Declaration)
(for th	a r cr-os national entry, check only (c) and enter PCT appl	ication number in the right)	PCT Application N		and,
		use when signing Declaration	after filing U.S. patent a	oplication	
(d)□ f	or which an application for U.S. pate	nt has been filed on:	Application Filing (Date	and,
ν	VHEREAS Panasonic Intellectual Broz	orty Monagement Co			·
Japan,	VHEREAS, <u>Panasonic Intellectual Prop</u> and	perty management Co.,	Ltd. of 1-61, Shiromi	2-chome, Chuo-	<u>-ku, Osaka-shi, Osaka 540-6207</u>
title, an	heirs, successors, legal representatives and interest in and to said invention and in a low. THEREFORE, for good and valuable	and assigns (hereinafter	designated as "Assignated	ee(s)") is/are des	irous of acquiring the entire right,
N	IOW, THEREFORE, for good and valuab	le consideration the	(3) machinay be grante	d therefor.	
title and	interest in and to: (i) said invention in the	I Inited Ctatas - 5 A	condition of the resident of the	io said Assigneei	(S) the entire and exclusive right
as the l	United States) and in all countries foreign	to the United Otales	a, its territories, depen	idencies and pos	sessions (hereinafter designated
thereof	in the United States and all countries force	ion to the United Or 1	versions, divisions, c	ontinuations, coi	ntinuations-in-part and reissues
priority	created by this patent application under a	ny troopy releting the	iorcinate designated	as Related App	Nications"), along with all rights of
reissue: United :	s and reexamination certificates which managements and in all countries foreign to the Undersigned accords to examine the Undersigned accords to examine the Undersigned accords to the Undersigned accords to the Undersigned accords to the Undersigned according to the Undersigne	ay be granted therefore,	and all rights to sue for	or past and future	ictioning air renewals, extensions, a infringement thereunder, in the
TI	ne undersigned agree(s) to everyte all no	DOM DOROGEN !-	ani or terms thereof.		
all pape for Prot	ection of Industrial Property or similar a	which may be necessary	in connection with cla	ims or provisions	of the International Convention
concern	ing this application or any and all Polato	d Applications the	seessary in connection	n with any inter	rerence which may be declared
and pro litle and	ducing evidence and proceeding with suc interest in and to said invention, this app	h interference, and for ar	y and all litigations reg	garding, or for the	every way possible in obtaining a purpose of protecting the right
egal pro	oceeding relating thereto and in suggest t	hereof for the hanest of	Annieu Applications of	r Letters Patent(s	s) therefore, and to testify in any
Mth suc Th	h applications as the Assignee(s) may de	em necessary or expedie	ent.	no execute sepa	irate assignments in connection
patent(s	ne undersigned agree(s) to perform all affi) to the Assignee(s) and to vest all rights ersigned if this Assignment had not been i	hereby conveyed to the a	pe necessary to obtain Assignee(s) as fully an	n a grant of a valid	d United States and any foreign
Th	e undersigned hereby authorizate) and a	constant (a) the O			
ssue pa	e undersigned hereby authorize(s) and r tents, to issue any and all Letters Patent(bby covenants that the undersigned has	s) resulting from said app	oner of Patents, and collication or any	officials of all fore Related Applicati	gign countries, whose duty is to
have) n	of executed, and will not execute, any acc	ignment sele	ch rue cume unenest	nerem assigned,	, and that the undersigned has
Th	e undersigned hereby does sell assign	and transfer unto a side	it of encumbrances in	connect nerewith	1.
he unde	ersigned hereby grant(s) the Assigned(s)	and the consisted LLO	and for appointing a r	new power of atto	omey in place thereof.
urther id	ersigned hereby grant(s) the Assignee(s) tentification which may be necessary or at.	desirable in order to co	atent attorneys and ag imply with the rules o	gents the power to of the U.S. Pater	to insert on this assignment any
The	e undersigned hereby agree(s) that the all	hovo chligotiano +h-II			
ntT eticU er	e undersigned hereby agree(s) that this A d States.	Assignment shall be cons	strued in accordance v	ootn individually with the law of the	' and collectively, e appropriate jurisdiction within
IN	WITNESS WHEREOF, executed by the u	ndersigned on the date(s	:) following the unders	igned name(s) e	
Box2	Each Inventor, please Sign and Date b	elow)	y renowing the dilders	igned name(s) an	no signature(s).
	(e) First Name, Last Name		(f) Signature		(g) Date signed
(1)	Takuya ISHII		100	•	Month, Date, Year
		Tabuyo	2 John.		Jan. 14, 2016
(2)	Atsushi KITAGAWA		<u> </u>		Month, Date, Year
· -					1
(3)	Tadata HATANAKA				Month, Date, Year
1					1

☐Check if additional paper(s) is/are attached. Total of ____ pages are submitted.

(4)

Month, Date, Year

² anasonic Ref*: <u>P665690-02</u>	Application Serial No. 15/0/3 4 26
Japan Firm Name: <u>MAEDA & PARTNERS</u>	Japan Firm Ref: M14-032US1-KI
JS Firm Name*: <u>MWE</u> *must be filled)	US Firm Ref:

ASSIGNMENT

WHEREAS, the undersigned has (have) invented the invention entitled:		
Box 1		
Title of invention:	-	
DC-DC CONVERTER MODULE		
	 	
1. For use when signing Declaration prior to filing L	J.S. patent application (check on	ly one box below)
(a) for which an application for U.S. patent has been executed	l by the undersigned cond	currently herewith, or
(b) ☐ for which an application for U.S. patent has been executed (if Declaration & Assignment are signed on the same day, check (a) and make no entry in the blank if the		, Of grment, enter the date(s) on which you signed the Declaration)
(c) ☐ for Which an International Application has been filed as: (for the PCT-US national entry; check only (c) and enter PCT application number in the right)	PCT Application No.	and,
2. For use when signing Declaration	after filing U.S. patent application	ON
(d)□ for which an application for U.S. patent has been filed on:	Application Filing Date	and,

WHEREAS, Panasonic Intellectual Property Management Co., Ltd. of 1-61, Shiromi 2-chome, Chuo-ku, Osaka-shi, Osaka 540-6207 Japan, and

its/their heirs, successors, legal representatives and assigns (hereinafter designated as "Assignee(s)") is/are desirous of acquiring the entire right, title, and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and intended to be legally bound hereby, the undersigned, by these presents, does sell, assign and transfer unto said Assignee(s) the entire and exclusive right, title and interest in and to; (i) said invention in the United States of America, its territories, dependencies and possessions (hereinafter designated as the United States) and in all countries foreign to the United States; and (ii) this patent application and any and all related patent application(s) disclosing said invention, including provisionals, non-provisionals, conversions, divisions, continuations, continuations–in-part and reissues thereof in the United States and all countries foreign to the United States (hereinafter designated as "Related Applications"), along with all rights of priority created by this patent application under any treaty relating thereto; and (iii) any and all Letters Patent(s), including all renewals, extensions, reissues and reexamination certificates which may be granted therefore, and all rights to sue for past and future infringement thereunder, in the United States and in all countries foreign to the United States for the full term or terms thereof.

The undersigned agree(s) to execute all papers necessary in connection with this application and any and all Related Applications thereof, all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements, all papers necessary in connection with any interference which may be declared concerning this application or any and all Related Applications thereof and to cooperate with the Assignee(s) in every way possible in obtaining and producing evidence and proceeding with such interference, and for any and all litigations regarding, or for the purpose of protecting the right, title and interest in and to said invention, this application and any and all Related Applications or Letters Patent(s) therefore, and to testify in any legal proceeding relating thereto and in support thereof, for the benefit of Assignee(s), and also to execute separate assignments in connection with such applications as the Assignee(s) may deem necessary or expedient.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States and any foreign patent(s) to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by the undersigned if this Assignment had not been made.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents, and officials of all foreign countries, whose duty is to issue patents, to issue any and all Letters Patent(s) resulting from said application or any and all Related Applications thereof to said Assignee(s) and hereby covenants that the undersigned has (have) full right to convey the entire interest herein assigned, and that the undersigned has (have) not executed, and will not execute, any assignment, sale, agreement or encumbrances in conflict herewith.

The undersigned hereby does sell, assign and transfer unto said Assignee(s) the full and exclusive authority for revoking power of attorney(s) executed by the undersigned in connection with this application and for appointing a new power of attorney in place thereof. The undersigned hereby grant(s) the Assignee(s) and the appointed U.S. patent attorneys and agents the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent Office for recordation of this desirable.

The undersigned hereby agree(s) that the above obligations shall apply to the undersigned both individually and collectively.

The undersigned hereby agree(s) that this Assignment shall be construed in accordance with the law of the appropriate jurisdiction within the United States.

IN WITNESS WHEREOF, executed by the undersigned on the date(s) following the undersigned name(s) and signature(s).

Box2	(Each Inventor, please Sign and Date b	pelow)	
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(1)	Takuya ISHII		Month, Date, Year
(2)	Atsushi KITAGAWA	Atsushi Kitagawa	Month, Date, Year Janyory 14,2016
(3)	Tadata HATANAKA	Jadata Matanaka.	Month, Date, Year January 14, 2016
(4)			Month, Date, Year

□Check if additional paper(s) is/are attached. Total of ____ pages are submitted.