## 504713163 01/04/2018

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4759885

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYAN	ICE:	ASSIGNMENT		
CONVEYING PARTY DA	<b>ATA</b>			
		Name	Execution Date	
SHIN YAMAUCHI			11/25/2017	
KEI SAKABE			11/15/2017	
MASAHIRO YONEMOTO	)		11/15/2017	
TAKANORI YAMAZOE			11/17/2017	
KEIICHIRO OHKAWA			11/16/2017	
RYOHHEI NAKAO			11/15/2017	
			·	
RECEIVING PARTY DA	ГА			
Name:	HITACI	HI AUTOMOTIVE SYSTEMS, LTD.		
Street Address:	2520, T	2520, TAKABA		
City:	HITACI	HITACHINAKA-SHI, IBARAKI		
State/Country:	JAPAN			
PROPERTY NUMBERS	Total: 1			
Property Type Application Number:		Number 15741784		
CORRESPONDENCE D				
CONNESPONDENCE D				
		(202)628-8844		
Fax Number: Correspondence will be	e sent to	(202)628-8844 • the e-mail address first; if that is unsucc d; if that is unsuccessful, it will be sent via		
Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i>	e sent to provideo	o the e-mail address first; if that is unsucc		
Fax Number: <i>Correspondence will be using a fax number, if p</i> Phone: Email:	e sent to provideo	<i>b the e-mail address first; if that is unsucc</i> <i>d; if that is unsuccessful, it will be sent via</i> 202-624-2500 eoconnell@crowell.com	a US Mail.	
Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name:	e sent to provideo	b the e-mail address first; if that is unsucc d; if that is unsuccessful, it will be sent via 202-624-2500 eoconnell@crowell.com CROWELL & MORING LLP INTELLECTUA	a US Mail.	
Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1:	e sent to provideo	b the e-mail address first; if that is unsucc d; if that is unsuccessful, it will be sent via 202-624-2500 eoconnell@crowell.com CROWELL & MORING LLP INTELLECTUAL P.O. BOX 14300	a US Mail.	
Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1:	e sent to provideo	b the e-mail address first; if that is unsucc d; if that is unsuccessful, it will be sent via 202-624-2500 eoconnell@crowell.com CROWELL & MORING LLP INTELLECTUA	a US Mail.	
Fax Number: <i>Correspondence will be using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	e sent to provideo	b the e-mail address first; if that is unsucc d; if that is unsuccessful, it will be sent via 202-624-2500 eoconnell@crowell.com CROWELL & MORING LLP INTELLECTUAL P.O. BOX 14300 WASHINGTON, D.C. 20044-4300	a US Mail.	
Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	e sent to provideo	b the e-mail address first; if that is unsucc d; if that is unsuccessful, it will be sent via 202-624-2500 eoconnell@crowell.com CROWELL & MORING LLP INTELLECTUAL P.O. BOX 14300 WASHINGTON, D.C. 20044-4300	a US Mail.	
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Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU	e sent to provideo	b the e-mail address first; if that is unsuccesful, it will be sent via         202-624-2500         eoconnell@crowell.com         CROWELL & MORING LLP INTELLECTUAL         P.O. BOX 14300         WASHINGTON, D.C. 20044-4300         114617.PA701US         MICHAEL H. JACOBS	a US Mail.	

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## ASSIGNMENT

(譲 渡 証)

As a below named inventor, I hereby declare that:

IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me by HITACHI AUTOMOTIVE SYSTEMS, LTD.,

a corporation organized under the laws of Japan, located at

2520, Takaba, Hitachinaka-shi, Ibaraki, JAPAN

receipt of which is hereby acknowledged I do hereby sell and assign to said HITACHI AUTOMOTIVE SYSTEMS, LTD., its successors and assigns, all my right, title and interest, in and for the United States of America, in and to

#### STORAGE BATTERY CONTROL DEVICE

invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefor, executed on even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by said HITACHI AUTOMOTIVE SYSTEMS, LTD.,

its successors, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said HITACHI AUTOMOTIVE SYSTEMS, LTD.,

Signed on the date(s) indicated aside our signatures:

**INVENTOR(S)** (発明者フルネームサイン)

DATE SIGNED (署名日)

1) <u>Shin Hamauch</u> Shin YAMAUCHI Nov. 25.2017 Kei SAKABE 2) 3) Masahiro YONEMOTO 4) Takanori YAMAZOE ..... 5 ) \_\_\_\_\_Keiichiro OHKAWA ..... Ryohhei NAKAO 6)\_\_\_\_\_ 7) \_\_\_\_\_ 

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#### BATTERY MANAGEMENT DEVICE, BATTERY SYSTEM, AND HYBRID VEHICLE CONTROL SYSTEM

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Signed on the date(s) indicated aside our signatures:

INVENTOR(S) (発明者フルネームサイン) DATE SIGNED (署名日)

1)	Masahiro YONEMOTO	
2) Kei	Sakabe Kei SAKABE	Nov. 15, 2017
3)	Takanori YAMAZOE	
4)	Shin YAMAUCH	
5)		
6)	Ryohhei NAKAO	
7)		
8)		•···

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INVENTOR(S)		
(発明者フルネームサイン)		

DATE SIGNED (署名日)

1)	Shin YAMAUCHI	
2)	Kei SAKABE	
3) Masahiro YONEMOTO	Masahiro YONEMOTO	11/15/2017
4 )	Takanori YAMAZOE	
5)	Keiichiro OHKAWA	
6)	Ryohhei NAKAO	
7)		
8 )		

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PATENT REEL: 044533 FRAME: 0140 As a below named inventor, I hereby declare that:

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Signed on the date(s) indicated aside our signatures:



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PATENT REEL: 044533 FRAME: 0141

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Signed on the date(s) indicated aside our signatures:

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4)_	Takanori YAMAZOE		
5)_	Keiichiro OHKAWA Keiichiro OHKAWA	11/16/2017	
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8)_			

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4)	Takanori YAMAZOE		
5)_	Keiichiro OHKAWA		
6)_	Ryvhei Robaw Ryohhei NAKAO	11/15/2017	
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8)_			

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DATE SIGNED

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**RECORDED: 01/04/2018**