# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5850089

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
MING LIU	10/17/2019
TAIZO YAMAWAKI	10/24/2019
ATSUSHI ARATA	10/18/2019
YASUSHI SUGIYAMA	10/18/2019
RYUSUKE SAHARA	10/18/2019

#### **RECEIVING PARTY DATA**

Name:	HITACHI AUTOMOTIVE SYSTEMS, LTD.
Street Address:	2520, TAKABA
City:	HITACHINAKA-SHI, IBARAKI
State/Country:	JAPAN
Postal Code:	312-8503

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16619001

### **CORRESPONDENCE DATA**

(202)628-8844 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.

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Email: edocket@crowell.com, ehadi@crowell.com

**Correspondent Name: CROWELL & MORING LLP** 

P.O. BOX 14300 Address Line 1:

Address Line 4: WASHINGTON, D.C. 20044-4300

ATTORNEY DOCKET NUMBER:	108005.PC842US
NAME OF SUBMITTER:	MICHAEL H. JACOBS
SIGNATURE:	/Michael H. Jacobs/
DATE SIGNED:	12/04/2019

**Total Attachments: 3** 

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**PATENT REEL: 051177 FRAME: 0499** 

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PATENT REEL: 051177 FRAME: 0500

## **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 citizen of Japan by HITACHI AUTOMOTIVE SYSTEMS, LTD., a corporation organized under the laws of Japan,

located at 2520, Takaba, Hitachinaka-shi, Ibaraki 312-8503, 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

## POWER SUPPLY APPARATUS AND ELECTRONIC CONTROL UNIT

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:

Date Signed (署名日)	INVENTOR(S) (発明者フルネームサイン)			
10/17/2019	د (Ming EIU)	Ming Lin	Ming	1)
	(Taizo YAMAWAKI)			2)
	(Atsushi ARATA)			3)
	(Yasushi SUGIYAMA)			4)
	(Ryusuke SAHARA)			5)
				6)
				7)
				8)

PATENT REEL: 051177 FRAME: 0501

# **ASSIGNMENT**

(譲渡証)

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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:

INDICATE OFICE

(署名日)	(発明者フルネームサイン)	
	(Ming LIU)	1)
10/24/2019	Tazi Jamawali (Taizo YAMAWAKI)	2)
	•	3)
	(Yasushi SUGIYAMA)	4)
	(Ryusuke SAHARA)	5)
4,001,011,011,011,011,011,011,011,011,01		6)
		7)
		8)

PATENT REEL: 051177 FRAME: 0502

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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 citizen of Japan by HITACHI AUTOMOTIVE SYSTEMS, LTD., a corporation organized under the laws of Japan,

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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;

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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:

**RECORDED: 12/04/2019** 

	INVENTOR(S) (発明者フルネームサイン)	Date Signed (署名日)
1)		
2)		
3)_(	Ottaushi Orrata (Atsushi ARATA)	10/18-/2019
4)	(asushi Sujiyama (Yasushi SUGIYAMA)	10/18/2019
5)	Ryusuhe Lahara (Ryusuke SAHARA)	10/18/2019
6)		
7)		
8)		

PATENT REEL: 051177 FRAME: 0503