

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
MASAKI HANO	09/25/2017
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:	15564838
CORRESPONDENCE DATA	
Fax Number:	(202)672-5399
<i>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.</i>	
Phone:	202-672-5300
Email:	kcox-baione@foley.com, lmnovak@foley.com, ipdocketing@foley.com
Correspondent Name:	PAVAN K. AGARWAL
Address Line 1:	FOLEY & LARDNER LLP, SUITE 600
Address Line 2:	3000 K STREET, N.W.
Address Line 4:	WASHINGTON, D.C. 20007-5109
ATTORNEY DOCKET NUMBER:	024536-0278
NAME OF SUBMITTER:	KIMBERLEY COX-BAIONE
SIGNATURE:	/Kimberley Cox-Baione/
DATE SIGNED:	10/06/2017
Total Attachments: 2	
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source=Assignment#page2.tif	

U.S. Rights--Sole or Joint

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

name and address of assignee *HITACHI AUTOMOTIVE SYSTEMS, LTD.,
2520 Takaba, Hitachinaka-shi, Ibaraki 312-8503 Japan*

(hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to this invention relating to

title of invention *MOTOR DRIVE APPARATUS AND METHOD FOR DETECTING
PHASE CURRENTS OF THREE-PHASE BRUSHLESS MOTOR*

as set forth in this United States Patent Application

- Check one* executed concurrently herewith
 executed on _____
 Serial No. _____ Filed _____

in and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

Each of the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns or to

assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention;

Each of the undersigned hereby grants the firm of **FOLEY & LARDNER LLP** the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

<i>NAME(S) AND SIGNATURE(S) OF INVENTOR(S)</i>		
Name: Masaki HANO	Signature: <i>Masaki Hano</i>	Date: <i>September 25, 2017</i>
Name:	Signature:	Date:
Name:	Signature:	Date:
Name:	Signature:	Date:
Name:	Signature:	Date:
<i>NAME(S) AND SIGNATURE(S) OF WITNESS(ES)</i>		
Name: <i>Hirokazu Shimizu</i>	Signature: <i>Hirokazu Shimizu</i>	Date: <i>September 25, 2017</i>
Name: <i>Nobuhiko Matsuo</i>	Signature: <i>Nobuhiko Matsuo</i>	Date: <i>September 25, 2017</i>
Name:	Signature:	Date:
Name:	Signature:	Date:
Name:	Signature:	Date:

Note: *Prima facie* evidence of execution may optionally be obtained by execution of this document before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by a certificate from a U.S. Consul.