504040174 10/06/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4086835

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Daisuke YAMASHITA	08/30/2016
Hirotsune WATANABE	08/30/2016
Masashi MORIKAWA	08/30/2016

RECEIVING PARTY DATA

Name:	Toyota Jidosha Kabushiki Kaisha	
Street Address:	1, Toyota-cho	
City:	Toyota-shi, Aichi-ken	
State/Country:	Japan	
Postal Code:	471-8571	

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	15287479		

CORRESPONDENCE DATA

Fax Number: (703)836-2787

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.

Phone: 703-836-6400 Email: email@oliff.com **Correspondent Name:** JAMES A. OLIFF Address Line 1: **OLIFF PLC**

Address Line 2: P.O. BOX 320850

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER: 171962 NAME OF SUBMITTER: RENEE TISDALE **SIGNATURE:** /Renee Tisdale/ **DATE SIGNED:** 10/06/2016

Total Attachments: 2

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> **PATENT** REEL: 040252 FRAME: 0106 504040174

ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e)) For Application with Filing Date on or after September 16, 2012

ASSIGNMENT

	inseri	(1)	Daisuke YAMASHITA	(2)	Hirotsune WATANABE
(1-8)	Legal Name(s)	(3)	Masashi MORIKAWA	(4)	
	of inventor(s)	(5)		(6)	
		(7)		(8)	
	. %.		isideration of the sum of one dollar (3 dersigned, the receipt and sufficiency , and hereby does assign, transfer and	111 W00000 919 1	r good and valuable consideration paid to each of tereby acknowledged, each undersigned agrees to
(9)	Assignee	(9) TOYOTA JIDOSHA KABUSHIKI KAISHA			
(10)	10) Insert Address of Assignee		(10) 1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan		
	(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as				
(11)	Insert Identification such as Title, Case	(11)	METHOD OF REUSING CORE S	SAND	
	Number, or Foreign Application Number	(Attor	ney Docket No.), fi	led on even date herewith or as
12)	Alternative	(12) U.S. Application Number			
	Identification for		· · · · · · · · · · · · · · · · · · ·	~~~~~~~	
	filed applications	filed			

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignce in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.
- 3) Each undersigned agrees to execute 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.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of OLIFF PLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

(13) Declaration

As an above named inventor, i hereby declare that:

Delice I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

The application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both

PATENT REEL: 040252 FRAME: 0107

Inventor Signature August 30,2016

5130,2016

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Kazumasa Uchida Oponelri Kauai nome August 30, 2016

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

auguer 30, 2016 Witness

Date