504889296 04/27/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4936037

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Masao YAMANAKA	03/20/2018
Yasuyuki KUSUMOTO	03/19/2018

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15964748

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:	181332
NAME OF SUBMITTER:	JASMINE L. BARFIELD
SIGNATURE:	/Jasmine L. Barfield/
DATE SIGNED:	04/27/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 4

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

ASSIGNMENT

	Invert	(1)	Masaa YAMANAKA	(2)	Yasuyuki KOSUMOFO
(3-8)	Legal Name(s)	(3)		(4)	
	of Inventor(s)	(5)	-	(6)	
		(7)		(8)	
		the and		cy of which are he	good and valuable consideration paid to each of roby acknowledged, each undersigned agrees to
(%)	Insert Name of Assignee	(9)	TOYOTA MOOSHA KABUSI	HELKAISHA	
(16)	Insert Address of Assignee	(10)	i, Toyota-che, Toyota-ski, Aid	hi-kes, 473-8571	JAPAN
		the enti- teventic continu	e right, title and interest for the U m, and in all applications for pater	nited States of Am at including any ar reason application	s, successors, assigns and legal representatives, erica as defined in 35 U.S.C. § 100, in the td sill provisional, non-provisional, divisional, n(s), and all Letters Patern, extensions, reissues vention known as
(11)	II) Insert Identification such as Title, Case		ROAD OBSTACLE DETECT	ION DEVICE, MI	ETFIOD, AND PROGRAM
	Number, or Foreign Application Number	(Atto	mey Docket No.), f	iled on even date herewith or as
(12)	Alternative	(12)	U.S. Application Number		
	Identification for	W			
	filos analicatione	Pitad			

- 1) Each understand agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to 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 Assignee 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 of similar agreements.
- A) Each undersigned agrees to perform all affirmative sets which may be necessary to obtain, maintain or confirm by reissue or
- seesamination a grant of a valid United States patent to the Assignce.

 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 berein 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.
- ti) Each undersigned hereby grams the firm of OLIFF PLC the power to insert on this assignment any further identification that may be meansary 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:

I believe I am the original inventor or an original joint inventor of a claimed inventor (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 contexts 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.

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

Date	March 20, 2018	Inventor Signature	Messet Lonanska	(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		inventor Signature		(SEAL).
neither,	This assignment should preferably be signed butten it should be signed before at least two with	efore (a) a Notary Publ usses who also sign her	is if within the U.S.A. (b) a U.S. Consul if outside the U ϵ	ISA. If
Date		Witness		
Date		Witness		

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

ASSIGNMENT

of Inventor(s) (5) (6) (7) (8) In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agree assign, and hereby does assign, transfer and set over to (9) Insert Name of Assignee Insert Address of Assignee (10) In Toyota-Cho, Toyota-shi, Aichi-ken, 471-8571 JAPAN (hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representative entire right, title and interest for the United States of America as defined in 35 U.S.C. §109, in the invention, and in all applications for patent including any and all provisional, non-provisional, division continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reiss and reexamination certificates that may be granted on the invention known as (11) Insert Identification such as Title, Case Number, or Foreign Application Number (Attorney Docket No.), filed on even date herewith or as (12) Alternative (12) U.S. Application Number Identifications for filed applications (13)		Insert	(1)	Masac YAMANAKA	(2)	Yasuyuki KUSUMOTO
In consideration of the sum of one deliar (\$1.00) and other good and valuable consideration paid to each the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agree assign, and hereby does assign, transfer and set over to (9) Insert Name of Assignee Insert Address of Assignee Insert Address of Assignee (10) I, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 JAPAN (hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representation 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, division continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reiss and reexamination certificates that may be granted on the invention known as (11) KOAD OBSTACLE DETECTION DEVICE, METHOD, AND PROGRAM (Attorney Docket No	(1-8)	Legal Name(s)	(3)		(4)	
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the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agree assign, and hereby does assign, transfer and set over to (9) TOYOTA JIDOSHA KABUSHIKI KAISHA (10) 1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 JAPAN (hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representation 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, division continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reiss and reexamination certificates that may be granted on the invention known as (11) Insert Identification such as Title, Case Number, or Foreign Application Number (Attorney Docket No.), filed on even date herewith or as (12) Alternative (13) U.S. Application Number Identification for			(7)			
Assignee (18) Assignee (19) TOYOTA JIDOSHA KABUSHIKI KAISHA (10) I. Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 JAPAN (hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representation 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, division continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reiss and reexamination certificates that may be granted on the invention known as (11) KOAD OBSTACLE DETECTION DEVICE, METHOD, AND PROGRAM (Attorney Docket No		700 700 or or	the unde	ersigned, the receipt and sufficiency	y of which are he	
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such as Title, Case Number, or Foreign Application Number (Attorney Docket No			the enti- invention continu	re right, title and interest for the Un on, and in all applications for patent ation, international, substitute and r	nited States of An tincluding any ar reissue applicatio	nerica as defined in 35 U.S.C. \$100, in the add all provisional, non-provisional, divisional, n(s), and all Letters Patent, extensions, reissues
Application Number (Attorney Docket No), filed on even date herewith or as (12) Alternative (12) U.S. Application Number Identification for	(11)	such as Title, Case	(11)	KOAD OBSTACLE DETECTA	ON DEVICE, M	ETHOD, AND PROGRAM
Identification for			(Attor	rney Docket No.		iled on even date herewith or as
	(12)	Alternative	(12)	U.S. Application Number		
filed applications filed		Identification for		***************************************		
		filed applications	filed			

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As an above named inventor, I hereby declare that:

I believe 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.

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

Date		Inventor Signature		•	(SEAL)
Date	March 19, 2018	Inventor Signature	YasuyuKī	Kusumoto	(SEAL)
Date	*	Inventor Signature	·		(SEAL)
Date		Inventor Signature	1		(SEAL)
Date		Inventor Signature	· · · · · · · · · · · · · · · · · · ·		_ (SEAL)
Date		Inventor Signature			_ (SEAL)
Date		Inventor Signature			(SEAL)
Date		Inventor Signature			_ (SEAL)
either, t	This assignment should preferably be signed be hen it should be signed before at least two with	efore: (a) a Notary Publi tesses who also sign her	ic if within the U.S.7 e:	A. (b) a U.S. Consul if outside the	U.S.A. IF
Date		Witness			·····
Date		Witness			

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