#### **PATENT ASSIGNMENT COVER SHEET**

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5310953

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
MASANOBU HIRAYAMA	11/28/2018
TAKAHIDE KATAGIRI	11/28/2018
YUGO TSUTSUMI	11/28/2018
MANABU HIROSE	11/28/2018
YASUHIRO KATSUKAWA	11/28/2018

#### **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:	16240824

#### **CORRESPONDENCE DATA**

**Fax Number:** (703)413-2220

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) 413-3000

**Email:** mreynolds@oblon.com

Correspondent Name: OBLON, ET AL.

Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	519387US
NAME OF SUBMITTER:	MORGAN REYNOLDS
SIGNATURE:	/Morgan Reynolds/
DATE SIGNED:	01/07/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).
T	•

Total Attachments: 5

PATENT REEL: 047914 FRAME: 0090

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Title of Invention	METHOD AND APPARATUS FOR MANUFACTURING GEAR					
As the below name	As the below named inventor, I hereby declare that:					
This declaration 🗵	The attached application, or					
is directed to:	United States application or PCT international application number					
The above-identifie	d application was made or authorized to be made by me.					
I believe that I am t	he original inventor or an original joint inventor of a claimed invention in the application.					
(hereinafter referred 8571 Japan, is des	YOTA JIDOSHA KABUSHIKI KAISHA If to as "ASSIGNEE") having places of business at: 1, Toyota-cho, Toyota-shi, Aichi-ken, 471- sirous of acquiring the entire right, title and interest in and to said invention and in and to any may be granted therefore in the United States and its territorial possessions and in any and all					
acknowledged, and said ASSIGNEE, the and in all foreign co- other relevant Inter- interest in and to a	FORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby for other good and valuable consideration, I, by these presents do sell, assign and transfer unto be full and exclusive right to the said invention in the United States and its territorial possessions countries (including the right to claim priority under the terms of the International Convention and national Treaties and Arrangements from the aforesaid application) and the entire right, title and my and all Letters Patent which may be granted therefor in the United States and its territorial any and all foreign countries and in and to any and all divisions, reissues, continuations, newals thereof.					
any and all foreign assignee of my enti (his) successors and	ze and request the Patent Office Officials in the United States and its territorial possessions and countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the re right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its d assigns, to the full end of the term for which said Letters Patent may be granted, as fully and would have been held by me had this Assignment and sale not been made.					
respecting said inv continuation, substi- all of said Letters possible to aid said	that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me vention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, tute, renewal and reissue applications, execute all necessary assignment papers to cause any and Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said ited States and its territorial possessions and in any and all foreign countries.					
by fine or imprison	ledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 ment of not more than five (5) years, or both.					
LEGAL NAME OF	INVENTOR					
Inventor: Masano	bu HIRAYAMA Date: November 28, 2018					
Signature: Mass	andy Hirangma					

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

Invention	METHOD AND	APPARATUS	FOR	MANUFACTURING GEAR
As the below name	d inventor, I hereby d	eclare that:		
This declaration 🗵	The attached applic	ation, or		
is directed to:	United States applied on	cation or PCT inte	rnation	nal application number
The above-identifie	d application was ma	de or authorized t	o be m	ade by me.
I believe that I am t	he original inventor o	r an original joint	invent	tor of a claimed invention in the application.
(hereinafter referre	sirous of acquiring th	') having places on the entire right, title	f busir le and	ness at: 1, Toyota-cho, Toyota-shi, Aichi-ken, 471-interest in and to said invention and in and to any es and its territorial possessions and in any and all
acknowledged, and said ASSIGNEE, the and in all foreign coother relevant Inter- interest in and to a	for other good and value full and exclusive to countries (including the national Treaties and my and all Letters Palany and all foreign	valuable consideraright to the said in eright to claim properties. Arrangements from the which may be a said and the said and the said areas and the said areas and the said areas are said and the said areas are said areas and the said areas are said are said areas are said areas are said areas are said areas areas are said areas are said areas are said areas areas are said areas areas areas areas are said areas areas areas are said areas	ation, I nvention riority om the be gran	DOLLARS (\$5.00), the receipt whereof is hereby by these presents do sell, assign and transfer unto on in the United States and its territorial possessions under the terms of the International Convention and aforesaid application) and the entire right, title and need therefor in the United States and its territorial to any and all divisions, reissues, continuations,
any and all foreign assignee of my enti (his) successors and	countries to issue as re right, title and inte d assigns, to the full	ny and all of said crest in and to the end of the term f	Letter same, or whi	the United States and its territorial possessions and rs Patent, when granted, to said ASSIGNEE as the for the sole use and behoof of said ASSIGNEE, its ich said Letters Patent may be granted, as fully and ment and sale not been made.
respecting said inv continuation, substi all of said Letters possible to aid said	vention, and testify tute, renewal and reis Patent to be issued to ASSIGNEE, its (his	in any legal pro ssue applications, to said ASSIGNE s) successors and	execuin execut EE, ma assign	or its (his) representatives any facts known to me or or its (his) representatives any facts known to me or
by fine or imprison	ment of not more than	false statement n five (5) years, or	nade in both.	this declaration is punishable under 18 U.S.C. 1001
LEGAL NAME OF	INVENTOR			
Inventor: Takahid	e KATAGIRI			Date: November 28, 2018
Signature: La	kahide Kata	giri		

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

Title of Invention	METHOD A	ND APPARATUS	FOR	MANUFACTURING GEAR	
As the below name	As the below named inventor, I hereby declare that:				
This declaration 🗵	] The attached app	olication, or			
is directed to:	United States ap filed on	plication or PCT inter	nationa	al application number	
The above-identifie	d application was	made or authorized to	be ma	de by me.	
I believe that I am	the original invento	or or an original joint i	invento	or of a claimed invention in the application.	
(hereinafter referre 8571 Japan, is de	d to as "ASSIGNE sirous of acquiring	the entire right, title	busine and i	ess at: 1, Toyota-cho, Toyota-shi, Aichi-ken, 471- nterest in and to said invention and in and to any s and its territorial possessions and in any and all	
acknowledged, and said ASSIGNEE, t and in all foreign c other relevant Inter interest in and to a	I for other good and the full and exclusion ountries (including mational Treaties and any and all forces any and all forces.	ed valuable considerate ve right to the said in a the right to claim prient Arrangements from Patent which may be	ion, I, ventior ority u m the a e grant	DOLLARS (\$5.00), the receipt whereof is hereby by these presents do sell, assign and transfer unto a in the United States and its territorial possessions under the terms of the International Convention and aforesaid application) and the entire right, title and ted therefor in the United States and its territorial to any and all divisions, reissues, continuations,	
any and all foreign assignce of my ent (his) successors an	n countries to issue ire right, title and id assigns, to the f	e any and all of said interest in and to the a full end of the term for	Letters same, f or whic	the United States and its territorial possessions and is Patent, when granted, to said ASSIGNEE as the for the sole use and behoof of said ASSIGNEE, its said Letters Patent may be granted, as fully and ment and sale not been made.	
respecting said in continuation, subst all of said Letters possible to aid said	vention, and testi itute, renewal and Patent to be issue d ASSIGNEE, its	fy in any legal proc reissue applications, e ed to said ASSIGNE (his) successors and	eeding execute E, mak assigns	or its (his) representatives any facts known to me g, sign all lawful papers, execute all divisional, e all necessary assignment papers to cause any and se all rightful oaths, and, generally do everything s, to obtain and enforce proper protection for said any and all foreign countries.	
		lful false statement m han five (5) years, or		this declaration is punishable under 18 U.S.C. 1001	
LEGAL NAME O	F INVENTOR				
Inventor: Yugo T	SUTSUMI		***************************************	Date: November 28, 2018	
Signature: May	DA TAUTAUM	1.			

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

Invention	METHOD	AND APPARATUS	FOR MANUFACTURING GEAR	
As the below named inventor, I hereby declare that:				
This declaration 🗵	The attached	application, or		
is directed to:	United States filed on	application or PCT into	ernational application number	
The above-identifie	d application w	as made or authorized	to be made by me.	
I believe that I am t	he original inve	entor or an original join	t inventor of a claimed invention in the application.	
(hereinafter referre 8571 Japan, is des	d to as "ASSIG sirous of acquir	ring the entire right, tit	HA of business at: 1, Toyota-cho, Toyota-shi, Aichi-ken, 471- ele and interest in and to said invention and in and to any ed States and its territorial possessions and in any and all	
acknowledged, and said ASSIGNEE, the and in all foreign conter relevant Inter- interest in and to a	for other good ne full and exch ountries (includ national Treatie ny and all Lett any and all f	I and valuable consider usive right to the said i ling the right to claim p es and Arrangements fr ters Patent which may foreign countries and	f FIVE DOLLARS (\$5.00), the receipt whereof is hereby ation, I, by these presents do sell, assign and transfer unto nvention in the United States and its territorial possessions priority under the terms of the International Convention and from the aforesaid application) and the entire right, title and be granted therefor in the United States and its territorial in and to any and all divisions, reissues, continuations,	
any and all foreign assignee of my enti (his) successors and	countries to is re right, title and d assigns, to the	ssue any and all of said and interest in and to the e full end of the term :	sials in the United States and its territorial possessions and d Letters Patent, when granted, to said ASSIGNEE as the e same, for the sole use and behoof of said ASSIGNEE, its for which said Letters Patent may be granted, as fully and Assignment and sale not been made.	
respecting said inv continuation, substi all of said Letters possible to aid said	vention, and te tute, renewal ar Patent to be is I ASSIGNEE, i	estify in any legal pro nd reissue applications sued to said ASSIGN its (his) successors and	IGNEE or its (his) representatives any facts known to me occeding, sign all lawful papers, execute all divisional, execute all necessary assignment papers to cause any and EE, make all rightful oaths, and, generally do everything assigns, to obtain and enforce proper protection for said and in any and all foreign countries.	
		willful false statement re than five (5) years, o	made in this declaration is punishable under 18 U.S.C. 1001 r both.	
LEGAL NAME OF	INVENTOR			
Inventor: Manabu	HIROSE		Date: November 28, 2018	
Signature: Manaj	bu Hirose			

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

Title of Invention METHOD AND APPARATUS FOR MANUFACTURING GEAR				
As the below named inventor, I hereby declare that:				
This declaration  The attached application, or				
is directed to: United States application or PCT international application number filed on				
The above-identified application was made or authorized to be made by me.				
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.				
WHEREAS, TOYOTA JIDOSHA KABUSHIKI KAISHA  (hereinafter referred to as "ASSIGNEE") having places of business at: 1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;				
NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.				
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.				
Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.				
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.				
LEGAL NAME OF INVENTOR				
Inventor: Yasuhiro KATSUKAWA Date: November 28, 2018				
Signature: Tasuhiro Katsukawa				

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

> PATENT REEL: 047914 FRAME: 0096

**RECORDED: 01/07/2019**