504727722 01/12/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4774446

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
NOBORU KAWAGUCHI	01/10/2018
HIDETAKA YAMAUCHI	01/10/2018
TOMOYA HATTORI	01/10/2018
KOJI HIROSE	01/10/2018

RECEIVING PARTY DATA

Name:	MITSUBISHI ELECTRIC CORPORATION	
Street Address: 7-3, MARUNOUCHI 2-CHOME, CHIYODA-KU		
City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	100-8310	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	29633222

CORRESPONDENCE DATA

Fax Number: (703)390-1277

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: 703 390 9051

Email: info@sbpatentlaw.com

Correspondent Name: STUDEBAKER & BRACKETT PC **Address Line 1:** 8255 GREENSBORO DRIVE

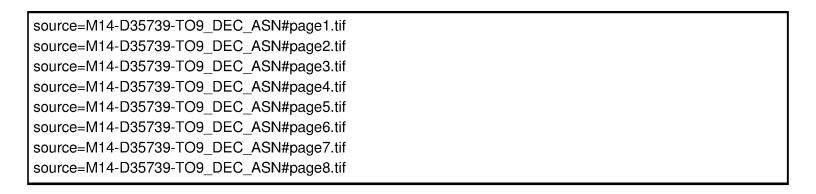
Address Line 2: SUITE 300

Address Line 4: TYSONS, VIRGINIA 22102

ATTORNEY DOCKET NUMBER:	002500-ME0230
NAME OF SUBMITTER:	DONALD R. STUDEBAKER
SIGNATURE:	/Donald R. Studebaker/
DATE SIGNED:	01/12/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 8

PATENT REEL: 044610 FRAME: 0055



PATENT REEL: 044610 FRAME: 0056



COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

Title of Invention:	
JOINT DRIVING MEMBER FOR ROBOT	
私は、以下に記名された発明者として、ここに下記 の通り宣粛する:	As a below named inventor, I hereby declare that:
本宣言書は、以下の出願に対するものである:	This declaration is directed to:
☑ 添付された出願、あるいは、 ☐ 米国出願番号またはPCT国際出願番号は、 であり、且つ の日に出願された出願(該当する場合)	The attached application, or United States application or PCT international application numberfiled on
2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
上記出願書(明細書及び図面)は、私が作成したものか、あるいは私がその作成を許可したものである。	The above-identified application was made or authorized to be made by me.
私は、本米選出顧の請求範囲で記載された発明に対	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
する原発明者であるか、或いは、原共同発明者であると信じている。	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.
	STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 CFR 1.69(b):
私は、ここでの宣誓または陳述において故意に偽り を述べた場合、合衆国法典第18巻第1001条に基づ き、罰金あるいは5年以下の懲役、または、両方の 懲罰を受けることを認める。	The Declaration and Assignment for Patent and Design Applications is an accurate translation of the corresponding English language Declaration and Assignment for Patent and Design Applications
	Signature: Signature: November 15, 2012

Page 1 of 8



WHEREAS the undersigned, hereinafter referred to as the assignor, has invented a certain improvement relating to the above identified application.

The inventor declaration for said applica	
	ted States Patent and Trademark Office;
	he United States Patent and Trademark Office on, practitioners associated with <u>STUDEBAKER & BRACKETT PC's</u>
	here in parentheses (Application Serial No) the
application serial number of said applica	tion when known.
	er the Patent Cooperation Treaty on, as
	the United States of America being designated.
	and active active at the factor active desired desired.
AND WHEREAS MITSUBISHI I	ELECTRIC CORPORATION of 7-3, Marunouchi 2-chome,
	reinafter referred to as the assignee, is desirous of acquiring the
	dapplication, including any and all divisions and continuations thereof,
	all patents which may be granted therefor, including any and all
renewals, reissues and prolongations the	
NOW, that for and in considerati	on of One Dollar (\$1.00), and other good and valuable consideration
	he receipt of which is hereby acknowledged, said assignor hereby
	nee, and said assignee's successors and assigns, the full and
	said application, including any and all divisions and continuations
thereof, and in and to said invention and	any and all patents which may be granted therefor, including any and
all renewals, reissues and prolongations	thereof; said assignee, and said assignee's successors and assigns,
	application, including any and all divisions and continuations thereof,
	stents which may be granted therefor, including any and all renewals,
reissues and prolongations thereof, with	all the rights, powers, privileges and advantages in anywise arising
from or appertaining thereto, for and dur	ing the term or terms of any and all such patents when granted,
including any and all renewals, reissues	and prolongations thereof, for the use and benefit of said assignee,
	igns, in as ample and beneficial a manner as the said assignor might
or could have help and enjoyed the sam	e, if this assignment had not been made.
	es to perform, upon the request of said assignee, or said assignee's
any and all renewals, reissues and proic	relating to the obtaining or to the asserting of said patents, including
	nganons thereor. Id requests the Commissioner of Patents and Trademarks to issue
	any and all divisions and continuations thereof, to said assignee, and
said assignee's successors and assigns	
	irm of STUDEBAKER & BRACKETT PC the power to insert on the
	claration and Assignment any further identification which may be
necessary or desirable in order to compl	y with the rules of the U.S. Patent and Trademark Office for
recordation of this document.	E ALICE MAN AND ALICE ALICE AND
	ent has been executed by the undersigned on the date opposite the
undersigned name.	"
発明者氏名/ Legal Name of Inventor	
	Noboru KAWAGUCHI
発明者の署名/ Signature	B付/ Date
, "J	No and the second
CN 12 A) (January 10, 2018)



COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

-	Title of Invention:	
	JOINT DRIVING MEMBER FOR ROBOT	
***************************************	私は、以下に記名された発明者として、ここに下記 の通り宣言する:	As a below named inventor, I hereby declare that:
***************************************	本宣言書は、以下の出願に対するものである:	This declaration is directed to:
***************************************	図 添付された出願、あるいは、 □ 米国出願番号またはPCT国際出願番号は、 であり、且つ の日に出願された出願(該当する場合)	The attached application, or United States application or PCT international application numberfiled on
	上記出顧書(明細書及び図面)は、私が作成したものか、あるいは私がその作成を許可したものである。	The above-identified application was made or authorized to be made by me.
-	私は、本米国出願の請求範囲で記載された発明に対	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
ARAL BARRA	する原発明者であるか、或いは、原共同発明者であ	***
RESERVED TO THE PERSON ASSESSED.	ると信じている。 。	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.
	私は、ここでの宣談または陳述において故意に偽り を述べた場合、合衆国法典第18巻第1001条に基づ	STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 CFR 1.69(b):
***************************************	き、剛金あるいは5年以下の懲役、または、両方の 懲罰を受けることを認める。	The Declaration and Assignment for Patent and Design Applications is an accurate translation of the corresponding English language Declaration and Assignment for Patent and Design Applications
***************************************		Signature: November 15, 2012

Page 3 of 8



Attorney Docket No. <u>002500-ME</u>

WHEREAS the undersigned, hereinafter referred to as the assignor, has invented a certain improvement relating to the above identified application.

remail to no more identified approach.	
The inventor declaration for said application is comb [X] said application to be filed in the United States F [] said application having been filed in the United S authorization being hereby given to the practitioners CUSTOMER NUMBER 78198, to insert here in parapplication serial number of said application when ki [] said application having been filed under the Pater Serial No	ratent and Trademark Office; tates Patent and Trademark Office on, associated with STUDEBAKER & BRACKETT PC's entheses (Application Serial No) the nown; at Cooperation Treaty on as States of America being designated. CORPORATION of 7-3, Marunouchi 2-chome, erred to as the assignee, is desirous of acquiring the , including any and all divisions and continuations thereof, which may be granted therefor, including any and all collar (\$1.00), and other good and valuable consideration of which is hereby acknowledged, said assignor hereby
thereof, and in and to said invention and any and all all renewals, reissues and prolongations thereof; sai to have, hold, exercise and enjoy the said application and the said invention and any and all patents which reissues and prolongations thereof, with all the right from or appertaining thereto, for and during the term including any and all renewals, reissues and prolongand said assignee's successors and assigns, in as a	patents which may be granted therefor, including any and dissignee, and said assignee's successors and assigns, including any and all divisions and continuations thereof, may be granted therefor, including any and all renewals, a, powers, privileges and advantages in anywise arising or terms of any and all such patents when granted, justions thereof, for the use and benefit of said assignee, imple and beneficial a manner as the said assignor might
successors or assigns, any and all acts relating to the any and all renewals, reissues and prolongations the AND said assignor authorizes and requests. Letters Patent on said application, and on any and all said assignee's successors and assigns, in accorda The undersigned hereby grants the law firm of STUI	n, upon the request of said assignee, or said assignee's e obtaining or to the asserting of said patents, including areof. the Commissioner of Patents and Trademarks to issue divisions and continuations thereof, to said assignee, and
necessary or desirable in order to comply with the rurecordation of this document.	
undersigned name.	stocked by the allians growth, and date appeared in
発明者氏名/ Legal Name of Inventor	
	Hidetaka YAMAUCHI
発明者の署名/ Signature	B付/ Date
Hideraka Yamauchi	January 10, 2018



COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

Title of Invention:	**
JOINT DRIVING MEMBER FOR ROBOT	*
私は、以下に配名された発明者として、ここに下記 の通り宣言する:	As a below named inventor, I hereby declare that:
本宣言書は、以下の出願に対するものである: 添付された出願、あるいは、 米国出願番号またはPCT国際出願番号は、 であり、且つ の日に出願された出願(該当する場合)	This declaration is directed to: The attached application, or United States application or PCT international application numberfiled on
上記出願書(明細書及び図面)は、私が作成したものか、あるいは私がその作成を許可したものである。	The above-identified application was made or authorized to be made by me.
私は、本米国出願の請求範囲で記載された発明に対 する原発明者であるか、或いは、原共同発明者であ	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
ると信じている。	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.
私は、ここでの宣誓または陳述において故意に偽り を述べた場合、合衆国法典第18巻第1001条に基づ き、罰金あるいは5年以下の懲役、または、両方の 懲罰を受けることを認める。	STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 CFR 1.69(b): The Declaration and Assignment for Patent and Design Applications is an accurate translation of the corresponding English language Declaration and Assignment for Patent and Design Applications
	Signature: Date: November 15, 2012

Page 5 of 8



renewals, reissues and prolongations thereof:

Attorney Docket No. 002500-ME

WHEREAS the undersigned, hereinafter referred to as the assignor, has invented a certain improvement relating to the above identified application.

The inventor declaration for said application is combined herewith.	
[X] said application to be filed in the United States Patent and Trademark Office;	
said application having been filed in the United States Patent and Trademark Office on,	
	•
	ž
application serial number of said application when known;	
[3] said application to be filed in the United States Patent and Trademark Office; [4] said application having been filed in the United States Patent and Trademark Office on, [5] uthorization being hereby given to the practitioners associated with STUDEBAKER & BRACKETT PC's [6] USTOMER NUMBER 78198, to insert here in parentheses (Application Serial No) the [7] population serial number of said application when known; [7] said application having been filed under the Patent Cooperation Treaty on, as [8] erial No, the United States of America being designated. AND WHEREAS MITSUBISHI ELECTRIC CORPORATION of 7-3, Marunouchi 2-chome,	
Serial No, the United States of America being designated.	
AND WHEREAS MITSUBISHI ELECTRIC CORPORATION of 7-3, Marunouchi 2-chome,	
Chiyoda-ku, Tokyo 100-8310 JAPAN, hereinafter referred to as the assignee, is desirous of acquiring the	
	eof,
and in and to said invention and any and all patents which may be granted therefor, including any and all	

NOW, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

The undersigned hereby grants the law firm of STUDEBAKER & BRACKETT PC the power to insert on the Assignment portion of this combined Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

This combined Declaration and Assignment has been executed by the undersigned on the date opposite the undersigned name.

発明者氏名/ Legal Name of Inventor		
	Tomoya HATTORI	
発明者の署名/ Signature	日付/ Date	3
Tomoya Hattori	January 10, 2018	



COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

Title of Invention:	
JOINT DRIVING MEMBER FOR ROBOT	
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	The attached application, or United States application or PCT international application numberfiled on
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私は、本米国出願の請求範囲で記載された発明に対	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
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ると信じている。	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.
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	The Declaration and Assignment for Patent and Design Applications is an accurate translation of the corresponding English language Declaration and Assignment for Patent and Design Applications
	Signature: Date: November 15, 2012
	ALIELANIAN TURBUNAN TURBUN TURBUN TURBUNAN TURBUN

Page 7 of 8



WHEREAS the undersigned, hereinafter referred to as the assignor, has invented a certain improvement relating to the above identified application.

The inventor declaration for said application is combined herewith.	
[X] said application to be filed in the United States Patent and Trademark Office;	
[] said application having been filed in the United States Patent and Trademark Office on,	
authorization being hereby given to the practitioners associated with <u>STUDEBAKER & BRACKETT PC's</u> <u>CUSTOMER NUMBER 78198</u> , to insert here in parentheses (Application Serial No) the	
application serial number of said application when known;	
[] said application having been filed under the Patent Cooperation Treaty on, as	
Serial No, the United States of America being designated.	
AND WHEREAS MITSUBISHI ELECTRIC CORPORATION of 7-3, Marunouchi 2-chome,	
Chiyoda-ku, Tokyo 100-8310 JAPAN, hereinafter referred to as the assignee, is desirous of acquiring the	
entire right, title and interest in and to said application, including any and all divisions and continuations thereof,	
and in and to said invention and any and all patents which may be granted therefor, including any and all	
renewals, reissues and prolongations thereof;	
NOW, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration	
paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby	
assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and	
exclusive right, title and interest in and to said application, including any and all divisions and continuations	
thereof, and in and to said invention and any and all patents which may be granted therefor, including any and	
all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns,	
to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof,	
and the said invention and any and all patents which may be granted therefor, including any and all renewals.	
reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising	
from or appertaining thereto, for and during the term or terms of any and all such patents when granted,	
including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee.	
and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might	
or could have held and enjoyed the same, if this assignment had not been made.	
AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's	
successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.	
AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue	
Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and	
said assignee's successors and assigns, in accordance herewith.	
The undersigned hereby grants the law firm of STUDEBAKER & BRACKETT PC the power to insert on the	
Assignment portion of this combined Declaration and Assignment any further identification which may be	
necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for	
recordation of this document.	
This combined Declaration and Assignment has been executed by the undersigned on the date opposite the	
undersigned name.	
MAGGE W AND 2015	
爱明者氏名/ Legal Name of Inventor Koji HIROSE	
発明者の署名/ Signature Koji Hirose BH/ Date	
2 L - Ling (1703)	

Page 8 of 8

January 12. 2018 K.H.

RECORDED: 01/12/2018