

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
NAOHIRO SHIBUYA	06/06/2019
YOSHIMI MORIYA	06/06/2019
KAZUO SUGIMOTO	06/06/2019
AKIRA MINEZAWA	06/06/2019
MENGXIONG WANG	06/13/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	mitsubishi electric corporation
<b>Street Address:</b>	7-3, MARUNOUCHI 2-CHOME, CHIYODA-KU
<b>City:</b>	TOKYO
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	100-8310
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16483074
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(703)205-8050
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<b>ATTORNEY DOCKET NUMBER:</b>	1163-1527PUS1
<b>NAME OF SUBMITTER:</b>	TUYEN LY
<b>SIGNATURE:</b>	/tuyen ly/
<b>DATE SIGNED:</b>	08/03/2019
<b>Total Attachments: 5</b>	
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**DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS**  
UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

**特許および意匠出願の宣言書ならびに譲渡証**

米国特許権または米国およびその他の外国特許権

<p>発明の名称 ⇒</p> <p>以下に記名された発明者として、私は以下の通り宣言します:</p> <p>本宣誓は本状に添付した出願書を対象としています。</p> <p>添付していない出願書 ⇒ 出願書が本状に添付されていない場合は、上記の出願書代理人整理番号で指定されたとおり、もしくは下記のとおりです。</p> <p>添付していない出願書 ⇒ 米国出願番号もしくは PCT (特許協力条約) 国際出願番号</p> <p>出願日を記入 ⇒ 出願日</p> <p>上記の出願書は私が作成、もしくは承認しました。</p> <p>私は、本出願で請求している発明について、私が最初かつ唯一の発明者、もしくは最初かつ共同発明者であると確信しています。</p> <p>私は、特許請求の範囲を含み、上記の出願書を検討し、内容を理解しています。</p> <p>私は、連邦規則法典第 37 編第 1 条 56 項に定義されている、特許性の有無について重要な情報を開示する義務があることを認めます。</p> <p>署名人は特定出願に記載された新規かつ有用な改良を発明しました。</p> <p>譲渡人氏名を記入 ⇒ は</p> <p>譲受人住所を記入 ⇒ に所在し、</p> <p>譲受人の継承人、後継者、法定代理人、および被譲渡者 (以下譲受人という) は当該発明のすべての権利、所有権、利益ならびにアメリカ合衆国において同発明に付与された特許証をすべて取得することを希望しています。</p> <p>該当する場合はボックスをチェック ⇒ <input type="checkbox"/> その他の外国における特許証取得希望。</p> <p>従って、有価、有益な対価を約因とし、その受領を確認した上で、署名人は売却、譲渡、移転しており、本状により、同譲受人にアメリカ合衆国ならびにその領土、属領、属国における当該発明の完全かつ排他的権利およびアメリカ合衆国ならびにその領土、属領、属国において、同発明、ならびにその分割出願、再発行出願、継続出願、変更出願、延長出願に付与された特許証の満期にわたる、もしくは同発明に付与された期間にわたるすべての権利、所有権、利益を売却、譲渡、移転します。</p>	<p>Title of Invention ⇒ OBJECT TRACKING DEVICE AND OBJECT TRACKING METHOD</p> <p>As a below named inventor, I hereby declare that:</p> <p>This declaration is directed to the application attached hereto.</p> <p>Application not Attached ⇒ If the application is not attached hereto, the application is as identified by the attorney docket number as set forth above and/or the following:</p> <p>Enter Appln. No. ⇒ United States Application Number or PCT International Appln. No. PCT/JP2017/008768</p> <p>Enter Filing Date ⇒ filed on March 6, 2017</p> <p>The above-identified application was made or authorized to be made by me.</p> <p>I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.</p> <p>I have reviewed and understand the contents of the above-identified application, including the claims.</p> <p>I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations § 1.56.</p> <p>WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.</p> <p>Insert Name of Assignee ⇒ WHEREAS, Mitsubishi Electric Corporation</p> <p>Insert Address of Assignee ⇒ of 7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8310 Japan,</p> <p>its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and</p> <p>Check Box if Appropriate ⇒ <input type="checkbox"/> in any foreign countries.</p> <p>NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned has sold, assigned and transferred, and by these presents does (do) sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.</p>
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署名人は本願、ならびにその継続出願、分割出願、変更出願、再発行出願、延長出願に関連するすべての書類を履行することに同意し、譲受人が必要もしくは適切とみなす、これらの出願に関連して別途譲渡証を履行することにも同意します。

署名人は本願、もしくはその継続出願、分割出願、変更出願、再発行出願、または特許証、それに基づく再発行特許に関連して宣言される抵触に関する必要なすべての書類を履行することに同意し、証拠の取得、およびそのような抵触案件を進めるにあたり、あらゆる面において前記譲受人に協力することに同意します。

署名人はすべての用紙および書類を履行し、工業所有権保護条約の請求や規定、もしくは類似協定に関して必要なあらゆる行為を試行することに同意します。

署名人は有効な米国特許ならびに外国の特許の承認を取得し、本状で前記譲受人に譲渡した同特許のすべての権利を完全かつ全面的に付与して、本譲渡および売却が行われていなければ、署名人が保持していたのと同様にするために必要なすべての積極的な行為を履行することに同意します。

署名人は米国ならびに外国の特許商標庁長官に前記出願、またはその継続出願、分割出願、変更出願、再発行出願から発生したすべての特許証を、すべての利益の譲受人としての前記譲受人に対して発行することを承認かつ請求し、本状で譲渡するすべての権利を譲るためのすべての権利を有し、対立関係にある協定を過去において履行したことがなく、将来において履行しないことを誓約します。

署名人は、米国特許庁の規定に従うために必要であれば、さらに確認事項を記入する権利を Birch, Stewart, Kolasch & Birch, LLP 法律事務所に付与します。

署名人は、本譲渡に対立する譲渡、売却、契約、債務が締結されたことがなく、今後締結されることがないここに誓約します。

署名人は、本宣言で故意に虚偽の表明を行うと、米国法典第 18 編第 1001 条に基づき、罰金または 5 年以下の拘禁、もしくはその両方の処罰対象になることをここに認識します。

以上の証として、署名人氏名欄の隣の日付をもって署名人が署名します。

出願データシート (PTO/SB/14 もしくは同等のもの) に発明企業の名前を含み、本状を添える必要があります。各発明者に付き個別の用紙を使用するか、下記のボックスをチェックして添付ページに記入し、追加の発明者をリストしてください。

The undersigned agrees to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agrees to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agrees to perform all affirmative acts which may be necessary to obtain a grant of (a) valid United States of America patent(s) or a grant of (a) valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorizes and requests the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has the full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grants the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

The undersigned hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

The undersigned hereby acknowledges 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 opposite the undersigned name.

An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use a separate form for each inventor; or check the box below and complete the attached page(s) to list additional inventors.

**STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 C.F.R. § 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: 9/25/2012

	LEGAL NAME OF INVENTOR 発明者氏名	
Inventor's Name 発明者氏名	Inventor: Naohiro SHIBUYA 発明者:	Date: 日付: June 6, 2019
Inventor's Signature 発明者署名	Signature: <i>Naohiro Shibuya</i> 署名:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY 共同発明者がいる場合の氏名	
Inventor's Name 発明者氏名	Inventor: Yoshimi MORIYA 発明者:	Date: 日付: June 6, 2019
Inventor's Signature 発明者署名	Signature: <i>Yoshimi Moriya</i> 署名:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY 共同発明者がいる場合の氏名	
Inventor's Name 発明者氏名	Inventor: Kazuo SUGIMOTO 発明者:	Date: 日付: June 6, 2019
Inventor's Signature 発明者署名	Signature: <i>Kazuo Sugimoto</i> 署名:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY 共同発明者がいる場合の氏名	
Inventor's Name 発明者氏名	Inventor: Akira MINEZAWA 発明者:	Date: 日付: June 6, 2019
Inventor's Signature 発明者署名	Signature: <i>Akira Minezawa</i> 署名:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY 共同発明者がいる場合の氏名	
Inventor's Name 発明者氏名	Inventor: Mengxiong WANG 発明者:	Date: 日付:
Inventor's Signature 発明者署名	Signature: 署名:	

Doc code: Oath  
 Document Description: Oath or declaration filed

PTC/AIA/02 (07-13)  
 Approved for use through 11/30/2020, OMB 0661-0032  
 U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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**SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)**

<b>Title of Invention</b>	OBJECT TRACKING DEVICE AND OBJECT TRACKING METHOD		
This statement is directed to:			
<input type="checkbox"/> The attached application, OR <input checked="" type="checkbox"/> United States application or PCT international application number <u>PCT/JP2017/008768</u> filed on <u>March 6, 2017</u>			
<b>LEGAL NAME of inventor to whom this substitute statement applies:</b>			
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)			
Mengxiong WANG			
Residence (except for a deceased or legally incapacitated inventor):			
City	State	Country	
Tokyo		JP	
Mailing Address (except for a deceased or legally incapacitated inventor):			
c/o Mitsubishi Electric Corporation, 7-3, Marunouchi 2-chome, Chiyoda-ku			
City	State	Zip	Country
Tokyo		1008310	JP
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.			
The above-identified application was made or authorized to be made by me:			
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			
Relationship to the inventor to whom this substitute statement applies:			
<input type="checkbox"/> Legal Representative (for deceased or legally incapacitated inventor only), <input checked="" type="checkbox"/> Assignee, <input type="checkbox"/> Person to whom the inventor is under an obligation to assign, <input type="checkbox"/> Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or <input type="checkbox"/> Joint Inventor.			

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9198 and select option 2.*

**SUBSTITUTE STATEMENT**

Circumstances permitting execution of this substitute statement:

- Inventor is deceased.
- Inventor is under legal incapacity.
- Inventor cannot be found or reached after diligent effort, or
- Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identify theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

**PERSON EXECUTING THIS SUBSTITUTE STATEMENT:**

Name: **Jumei MATSUI** June 13, 2019  
Date (Optional)

Signature: *Jumei Matsui*

**APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:**

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Mitsubishi Electric Corporation

Applicant Name:

Title of Person Executing This Substitute Statement: **General Manager, Patent Administration Department**

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City **Tokyo** State \_\_\_\_\_ Country **JP**

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

c/o Mitsubishi Electric Corporation, 7-3, Marunouchi 2-chome, Chiyoda-ku

City **Tokyo** State \_\_\_\_\_ Zip **1008310** Country **JP**

Note. Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.