506202946 08/13/2020

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6249685

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
MASAYUKI KONDO	07/10/2020
YUKA YOKOBORI	07/20/2020
TOSHIHISA OGURA	07/07/2020
MASAAKI HOSHI	07/07/2020
HIROYUKI INUTA	07/08/2020

#### 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:	29746417

#### **CORRESPONDENCE DATA**

506202946

**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-ME0349	
NAME OF SUBMITTER:	DONALD R. STUDEBAKER	
SIGNATURE:	/Donald R. Studebaker/	
DATE SIGNED:	08/13/2020	
This document serves as an Oath/Declaration (37 CFR 1.63).		

PATENT REEL: 053490 FRAME: 0582

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PATENT REEL: 053490 FRAME: 0583



As a below named inventor, I hereby declare that:
This declaration is directed to:  The attached application, or United States application or PCT international application number
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.  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):
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: 11/15/2012



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

e inventor declaration for said application is combined herewith.	
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,	
horization being hereby given to the practitioners associated with STUDEBAKER & BRACKETT PC's	
STOMER NUMBER 78198, to insert here in parentheses (Application Serial No) the	ne
plication serial number of said application when known;	
said application having been filed under the Patent Cooperation Treaty on	_, as
rial No, the United States of America being designated.	
AND WHEREAS MITSUBISHI ELECTRIC CORPORATION of 7-3, Marunouchi 2-chome,	
underly. Tologo 100 0240 18 DAM homeineften referred to an the preferred in decision of any side of the	

Chivoda-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.

発明者氏名/ Legal Name of Inventor	Masayuki KONDO
発明者の署名/ Signature	日付/ Date
Masayuki Kondo	July 10, 2020



Title of Invention:	
LIGHTING DEVICE	
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:  滋付された出願、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	This declaration is directed to:  The attached application, or United States application or PCT international application number
する場合) 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。 私は、本米国出願の請求範囲で記載された発明に対	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.
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: 11/15/2012



**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 combin [X] said application to be filed in the United States Pa [ ] said application having been filed in the United States authorization being hereby given to the practitioners a CUSTOMER NUMBER 78198, to insert here in parel application serial number of said application when knot [ ] said application having been filed under the Patent Serial No, the United States and application serial No, the United States and application is combined in the United States and application is combined in the United States Page 1 and application having been filed under the Patent Serial No, the United States Page 2 and application having been filed in the United States Page 2 and application having been filed in the United States Page 2 and application having been filed in the United States Page 2 and application having been filed in the United States Page 2 and application having been filed in the United States Page 2 and application having been filed in the United States Page 2 and application having been filed in the United States Page 2 and application having been filed under the Patent States Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 and application having been filed under the Page 2 an	attent and Trademark Office; attes Patent and Trademark Office on, associated with <u>STUDEBAKER &amp; BRACKETT PC's</u> attent and Trademark Office on, associated with <u>STUDEBAKER &amp; BRACKETT PC's</u> attent and Trademark Office; attent and Trademark Office on, attent and Tra
Chiyoda-ku, Tokyo 100-8310 JAPAN, hereinafter referentire 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 assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the 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 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 Commis	
発明者氏名/ Legal Name of Inventor	Yuka YOKOBORI
発明者の署名/ Signature	日付/ Date

Page 4 of 10

July, 20, 2020



As a below named inventor, I hereby declare that:
This declaration is directed to:  The attached application, or United States application or PCT international application number
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.  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):
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: 11/15/2012



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 STUDEBAKER & BRACKETT PC's  CUSTOMER NUMBER 78198, 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 <u>MITSUBISHI ELECTRIC CORPORATION</u> of <u>7-3, Marunouchi 2-chome</u> , <u>Chiyoda-ku, Tokyo 100-8310 JAPAN</u> , 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 assignee, and said assigner 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 necess
発明者氏名/ Legal Name of Inventor Toshihisa OGURA
発明者の署名/ Signature 日付/ Date
小倉 机文 Juny 7 2020



Title of Invention:	
LIGHTING DEVICE	
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:  The attached application, or United States application or PCT international application number
する場合) 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。 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、原共同発明者であると信じている。 私は、ここでの宣誓または陳述において故意に偽り	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.  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):
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NOW, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assigner, 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 t
Masaaki HOSHI
発明者の署名/ Signature 日付/ Date
里 匡朝 Juny 7, 2020



Title of Invention:	
LIGHTING DEVICE	
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:  The attached application, or United States application or PCT international application number
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**RECORDED: 08/13/2020** 

### 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.

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発明者氏名/ Legal Name of Inventor Hiroyuki INUTA
発明者の署名/ Signature 大田 寛之  July 8, 2020

Page 10 of 10

**PATENT REEL: 053490 FRAME: 0593**