### 502556943 11/04/2013

#### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2602607

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
NARUHITO HOKA	09/02/2013
MANABU TANAHARA	09/02/2013
TAKESHI SHIMAMURA	09/02/2013

### **RECEIVING PARTY DATA**

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

### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14071367

#### **CORRESPONDENCE DATA**

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Address Line 2: SUITE 102

Address Line 4: RESTON, VIRGINIA 20191

ATTORNEY DOCKET NUMBER:	005700-ME0060
NAME OF SUBMITTER:	TIM L. BRACKETT, JR.
Signature:	/Tim L. Brackett, Jr./
	_

PATENT 502556943 REEL: 031540 FRAME: 0298

DP \$40.00 14071367

Date:	11/04/2013
Total Attachments: 6 source=DEC_ASN#page1.tif source=DEC_ASN#page2.tif source=DEC_ASN#page3.tif source=DEC_ASN#page4.tif source=DEC_ASN#page5.tif source=DEC_ASN#page6.tif	

PATENT REEL: 031540 FRAME: 0299



Attorney Docket No.	
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# COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

Title of Invention:	
ARRAY SUBSTRATE AND DISPLAY 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:
<ul><li>□ 添付された出願、あるいは、</li><li>□ 米国出願番号またはPCT国際出願番号は、</li><li>の日に出願された出願(該当する</li></ul>	The attached application, or United States application or PCT international application number
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。	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、原共同発明者であると信じている。	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
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。	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: <u>11/15/2012</u>



Attornev	Docket No.	

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.\_\_\_\_\_ application serial number of said application when known; [ ] said application having been filed under the Patent Cooperation Treaty on \_ , the United States of America being designated. Serial No. AND WHEREAS Mitsubishi Electric Corporation of <u>7-3, Marunouchi 2-chome, Chiyoda-ku,</u> Tokyo 1008310, 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 sald assignee, and said assignee's successors and assigns, the full and

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 assigner 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 Naruhito HOKA			
発明者の署名/ Signature		目付/ Date	
Naruhito	Hoka		September 2, 2013



Attorney	Docket No.	

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

Title of Invention:	
ARRAY SUBSTRATE AND DISPLAY 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:
□ 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、	The attached application, or United States application or PCT international application number
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、原共同発明者であると信じている。	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
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。	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: K
	Date: <u>11/15/2012</u>



recordation of this document.

Attorney	Docket No.	

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 &amp; BRACKETT PC's 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 1008310, 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

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 Manabu TANAHARA	
	発明者の署名/ Signature	日付/ Date
THE RESERVE THE PERSON	Marabu Tanahara	September 2.2013



Attorney Docket No.	
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# COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

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Title of Invention:	
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本宣言書は、以下の出願に対するものである:	This declaration is directed to:
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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。	The above-identified application was made or authorized to be made by me.
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認める。	STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 CFR 1.69(b):
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	Signature: K
	Date: <u>11/15/2012</u>



**RECORDED: 11/04/2013** 

Attorney Docket No.	
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Tokyo 1008310, 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,
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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 assigner 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.
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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 Takeshi SHIMAMURA
発明者の署名/ Signature B付/ Date
Takeshi Shimamura September 2, 2013

Page 2 of 2