#### 06/13/2016 503867382

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3914031

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
TATSUNORI USUGI	05/16/2016
KOUZABUROU KURITA	05/23/2016
TAKEMASA KOMORI	05/12/2016
JUNYA NASU	05/12/2016

#### **RECEIVING PARTY DATA**

Name:	HITACHI, LTD.	
Street Address: 6-6, MARUNOUCHI 1-CHOME		
City:	CHIYODA-KU, TOKYO	
State/Country: JAPAN		
<b>Postal Code:</b> 100-8280		

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15180146

### CORRESPONDENCE DATA

Fax Number: (202)628-8844

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: 202-624-2500

Email: eoconnell@crowell.com **Correspondent Name: CROWELL & MORING LLP** 

Address Line 1: P.O. BOX 14300

Address Line 4: WASHINGTON, D.C. 20044-4300

ATTORNEY DOCKET NUMBER:	106562.69191US
NAME OF SUBMITTER:	CAMERON W. BEDDARD
SIGNATURE:	/Cameron W. Beddard/
DATE SIGNED:	06/13/2016

### **Total Attachments: 4**

source=69191US\_Assignment#page1.tif source=69191US Assignment#page2.tif source=69191US\_Assignment#page3.tif

source=69191US\_Assignment#page4.tif

### ASSIGNMENT ( 譲 渡 証 )

As a below named inventor, I hereby declare that:

'IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me citizen of Japan by HITACHI, LTD.

a corporation organized under the laws of Japan, located at 6-6, Marunouchi 1-chome, Chiyoda-ku, Tokyo, 100-8280 Japan receipt of which is hereby acknowledged I do hereby sell and assign to said HITACHI, LTD. its successor and assigns, all my right, title and interest, in and for the United States of America, in and to

# SKEW ADJUSTMENT CIRCUIT, SEMICONDUCTOR DEVICE, AND SKEW CALIBRATION METHOD

invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefor, executed on even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted,

to be held and enjoyed by said HITACHI, LTD.

its successor, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said HITACHI. LTD.

Signed on the date(s) indicated aside our signatures:

INVENTOR(S) (発明者フルネームサイン) Date Signed (署名日)

1)_	Laternosi WAATSKORIUSUGI	May	16,2016
2)_	Kouzaburou Kurita	4	
3)_	Takemasa Komori		·
4)_	Junya Nasu		
5)_			

### ASSIGNMENT (譲渡証)

As a below named inventor, I hereby declare that:

IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me citizen of Japan by HITACHI, LTD. a corporation organized under the laws of Japan,

located at 6-6, Marunouchi 1-chome, Chiyoda-ku, Tokyo, 100-8280 Japan

receipt of which is hereby acknowledged I do hereby sell and assign to said HITACHI, LTD.

its successor and assigns, all my right, title and interest, in and for the United States of America, in and to

### SKEW ADJUSTMENT CIRCUIT, SEMICONDUCTOR DEVICE, AND SKEW CALIBRATION METHOD

invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefor, executed on even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted,

to be held and enjoyed by said HITACHI, LTD.

its successor, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said HiTACHI, LTD.

Signed on the date(s) indicated aside our signatures:

INVENTOR(S) (発明者フルネームサイン) Date Signed (署名日)

1)_	***************************************	TATSUNORI USUGI	
2)_	Konzalowy Kurita	Kouzaburou Kurita	5/23/2016
3}_	. 0	Takemasa Komori	
4)		Junya Nasu	
5)_			

### ASSIGNMENT

(譲渡証)

As a below named inventor, I hereby declare that:

IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me citizen of Japan by HITACHI, LTD.

a corporation organized under the laws of Japan, located at 6-6, Marunouchi 1-chome, Chiyoda-ku, Tokyo, 100-8280 Japan receipt of which is hereby acknowledged I do hereby sell and assign to said HITACHI, LTD. its successor and assigns, all my right, title and interest, in and for the United States of America, in and to

### SKEW ADJUSTMENT CIRCUIT, SEMICONDUCTOR DEVICE, AND SKEW CALIBRATION METHOD

invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefor, executed on even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted,

to be held and enjoyed by said HITACHI, LTD.

its successor, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said HITACHI, LTD.

Signed on the date(s) indicated aside our signatures:

INVENTOR(S) (発明者フルネームサイン) Date Signed (署名日)

1)_		TATSUNORI USUGI	
· 2)_		Kouzaburou Kurita	
3)_	Takemasa Komori	Takemasa Komori	May 12, 2016
4)_		Junya Nasu	
5)_			

### ASSIGNMENT ( 譲 渡 証 )

As a below named inventor, I hereby declare that:

IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to me citizen of Japan by HITACHI, LTD. a corporation organized under the laws of Japan, located at 6-6, Marunouchi 1-chome, Chiyoda-ku, Tokyo, 100-8280 Japan receipt of which is hereby acknowledged I do hereby sell and assign to said HITACHI, LTD. its successor and assigns, all my right, title and interest, in and for the United States of America, in and to

## SKEW ADJUSTMENT CIRCUIT, SEMICONDUCTOR DEVICE, AND SKEW CALIBRATION METHOD

invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefor, executed on even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted.

to be held and enjoyed by said HITACHI, LTD.

its successor, assigns or other legal representatives, to the full end of term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said HITACHI, LTD.

Signed on the date(s) indicated aside our signatures:

INVENTOR(S)	
(発明者フルネームサイ	ン

Date Signed (图名日)

1)	-	TATSUNORI USUGI	· · · · · · · · · · · · · · · · · · ·
2)		Kouzaburou Kurita	
3) <u>·</u>	<u></u>	Takemasa Komori	
<sup>4)</sup>	Junya Noser	Junya Nasu	May 12, 20/6
5)	·		

REEL: 038892 FRAME: 0800

PATENT -

RECORDED: 06/13/2016