503711009 02/26/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3757650

	CORRECTIVE ASSIGNMENT	
previously	Assignment to correct the ADD THE FIFTH INVENTOR recorded on Reel 037519 Frame 0750. Assignor(s) hereby e ASSIGNMENT OF ASSIGNORS INTEREST.	

CONVEYING PARTY DATA

Name	Execution Date
YUKI MORI	11/05/2015
TOSHIYUKI MINE	11/05/2015
HIROSHI MIKI	11/05/2015
MIEKO MATSUMURA	11/05/2015
HIROTAKA HAMAMURA	11/05/2015

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14904685

CORRESPONDENCE DATA

Fax Number: (703)610-8686

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: 7039039000

Email: tpurifoy@milesstockbridge.com, ipdocketing@milesstockbridge.com

Correspondent Name: ERIC G. KING

Address Line 1: MILES & STOCKBRIDGE P.C.

Address Line 2: 1751 PINNACLE DRIVE, SUITE 1500

Address Line 4: TYSONS CORNER, VIRGINIA 22102-3833

ATTORNEY DOCKET NUMBER: XA-13032/T3381-22104US01

NAME OF SUBMITTER: TYNISHA PURIFOY

SIGNATURE: /Tynisha Purifoy/

DATE SIGNED: 02/26/2016

Total Attachments: 8 source=XA-13032_Notice of Recordation of Assignment Document#page1.tif

source=XA-13032_Notice of Recordation of Assignment Document#page1.tif

source=XA-13032_Notice of Recordation of Assignment Document#page3.tif

source=XA-13032_Notice of Recordation of Assignment Document#page4.tif

source=XA-13032_Notice of Recordation of Assignment Document#page5.tif

source=XA-13032_Notice of Recordation of Assignment Document#page6.tif

source=XA-13032_Notice of Recordation of Assignment Document#page7.tif

source=XA-13032_Notice of Recordation of Assignment Document#page8.tif

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3700634

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUKI MORI	11/05/2015
TOSHIYUKI MINE	11/05/2015
HIROSHI MIKI	11/05/2015
MIEKO MATSUMURA	11/05/2015

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14904685

CORRESPONDENCE DATA

Fax Number: (703)610-8686

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: 7039039000

Email: tpurifoy@milesstockbridge.com, ipdocketing@milesstockbridge.com

Correspondent Name: ERIC G. KING

Address Line 1: MILES & STOCKBRIDGE P.C. Address Line 2: 1751 PINNACLE DRIVE, SUITE 1500

Address Line 4: TYSONS CORNER, VIRGINIA 22102-3833

ATTORNEY DOCKET NUMBER:	XA-13032/T3381-22104US01
NAME OF SUBMITTER:	TYNISHA PURIFOY
SIGNATURE:	/Tynisha Purifoy/
DATE SIGNED:	01/19/2016

Total Attachments: 5

source=Assignment#page1.tif source=Assignment#page2.tif

(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, Japan,

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

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

SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME

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 successors, 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:

Date Signed (署名日)	INVENTOR(S) (発明者フルネームサイン)	
November 5, 2015	1) Mori (Yuki MORI)	
	2) (Toshiyuki MINE)	
	3) (Hiroshi MIKI)	
	4) (Mieko MATSUMURA)	
	5) (Hirotaka HAMAMURA)	
	6)	
	7)	
	8)	

(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, Japan,

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

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

SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME

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 successors, 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)

7)

1)	(Yuki MORI)	Line
2)	Toshiyuki Mihe (Toshiyuki MINE)	November 5, 2015
3)	(Hiroshi MIKI)	
4)	(Mieko MATSUMURA)	
5)_	(Hirotaka HAMAMURA)	

PATENT REEL: 037929 FRAME: 0148

Date Signed

(署名日)

(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, Japan,

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

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

SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME

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 successors, 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 HITACHL 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 (署名目)	
1)	(Yuki MORI)		
2)	(Toshiyuki MINE)		
3)_	White (Hiroshi MIKI)	November 5, 2015	
4) _	(Mieko MATSUMURA)		
5)	(Hirojaka HAMAMURA)		
6)			
7)_			
8)			

(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, Japan,

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

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

SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME

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 successors, 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)	(Yuki MORI)	
2)	(Toshiyuki MINE)	
3)	(Hiroshi MIKI)	
4)	Mieko Matsumura (Mieko Matsumura)	November 5, 2015
5)	(Hirotaka HAMAMURA)	
6)		
7).		
8)		

(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, Japan,

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

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

SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME

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 successors, 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:

RECORDED: 02/26/2016

	INVENTOR(S) (発明者フルネームサイン)	D ate Sig ned (署名日)
1)	(Yuki MORI)	
2)	(Toshiyuki MINE)	
3)	(Hiroshi MIKI)	
4)	(Mieko MATSUMURA)	
5)	Idintaha Idamamura (Hirotaka HAMAMURA)	November 5, 2015
6)		
7)		
8)		