505163524 10/29/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT5210291

Stylesheet Version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HIKARU KOYAMA	09/18/2018
TOSHIO OKOCHI	09/20/2018
TOSHIHIRO KUJIRAI	09/18/2018

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:	16173020

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: asaguros@crowell.com, edocket@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:	109896.PB668US
NAME OF SUBMITTER:	MICHAEL H. JACOBS
SIGNATURE:	/Michael H. Jacobs/
DATE SIGNED:	10/29/2018

Total Attachments: 3

source=PB668US_Assignment#page1.tif source=PB668US_Assignment#page2.tif source=PB668US_Assignment#page3.tif

PATENT 505163524 REEL: 047337 FRAME: 0686

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

DATA ANALYSIS SYSTEM AND DATA ANALYSIS APPARATUS

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) _)tikaru	Koyama	Hikaru KOYAMA	9/18/2018
2) _			Toshio OKOCHI	
3) _			Toshihiro KUJIRAI	
4) _	and the state of t			
5) _		`	·	
6) _		All and the second seco		Mark Andrews Control Control
7)				
8) _				

PATENT REEL: 047337 FRAME: 0687

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

DATA ANALYSIS SYSTEM AND DATA ANALYSIS APPARATUS

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)

	INVENTOR(S) (発明者フルネームサイン)	Date Signed (署名日)
1) _	Hikaru KOYAMA	
2) _	Z Choul Toshio OKOCHI	9/20/20/8
3) _	Toshihiro KUJIRAI	*: **: **: **: **: **: **: **: **: **:
4) _		
5)_		
6) _		
7) _		ж. ж. н
8)	·	

PATENT REEL: 047337 FRAME: 0688

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

DATA ANALYSIS SYSTEM AND DATA ANALYSIS APPARATUS

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)	Hikaru KOYAMA	
2)	Toshio OKOCHI	
3)	- Kijini Toshihiro KUJIRAI	9/18/2018
4)		
5)	<u>.</u>	
6)		
7)		
8)		

PATENT REEL: 047337 FRAME: 0689

RECORDED: 10/29/2018