504811845 03/09/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4858579

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RYOICHI TAKASHIMA	02/14/2018
YOHEI KAWAGUCHI	02/14/2018
TAKASHI SUMIYOSHI	02/13/2018
MASAHITO TOGAMI	02/13/2018

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15758747

CORRESPONDENCE DATA

Fax Number: (703)684-1157

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: 703-684-1120

Email: svannarath@mmiplaw.com **Correspondent Name:** MATTINGLY & MALUR, PC Address Line 1: 1800 DIAGONAL ROAD

Address Line 2: SUITE 210

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	SUN-11470
NAME OF SUBMITTER:	JOHN R. MATTINGLY
SIGNATURE:	/John R. Mattingly/
DATE SIGNED:	03/09/2018

Total Attachments: 4

source=11470-ASN#page1.tif source=11470-ASN#page2.tif

> **PATENT REEL: 045154 FRAME: 0707** 504811845

source=11470-ASN#page3.tif source=11470-ASN#page4.tif

> PATENT REEL: 045154 FRAME: 0708

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, 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

SOUND SIGNAL PROCESSING METHOD AND DEVICE

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:

(発明者フルネームザイン)		(署名日)	
1) Rysichi Tal	Kashima Ryoichi TAKASHIMA	2/14 /2018	
2)	Yohel KAWAGUCHI		
3)	Takashi SUMIYOSHI		
4)	Masahito TOGAMi		
5)			
6)		Market Peter - The course over the content of the C	
7)	The same of the sa	And the second s	
8)			

3737940-1

PATENT REEL: 045154 FRAME: 0709

DATE SIGNED

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, 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

SOUND SIGNAL PROCESSING METHOD AND DEVICE

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)_	Ryoichi TAKASHIMA	-10	
2)_	John Tomagnoh Yohei KAWAGUCHI	2/14/2018.	
3)_	/ Takashi SUMIYOSHI		
4)_	Masahito TOGAMI		
5)_			
6)_		And the second s	
7)_		- Allerton	
8)_			

3737940-1

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, JAPAN

receipt of which is hereby acknowledged t 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

SOUND SIGNAL PROCESSING METHOD AND DEVICE

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:

3737940-1

INVENTOR(S) (発明者フルネームサイン)		DATE SIGNED (署名日)	
1)	Ryoichi TAKASHIMA		
2)	Yohei KAWAGUCHI	<u></u>	
3) Tak	achi Sungarhi Takashi SUMIYOSHI	2/13/20/8	
4)	Masahito TOGAMI		
5) <u>-</u>			
6)			
7)			
8)			

PATENT REEL: 045154 FRAME: 0711

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, JAPAN

receipt of which is hereby acknowledged! 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

SOUND SIGNAL PROCESSING METHOD AND DEVICE

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)	Ryoichi TAKASHIMA		
2)	Yohel KAWAGUCHI		
3)	Takashi SUMIYOSHi		
3) 4) Maskh	Masahito TOGAMI	Feb. 13, 2018	
5)	·		
6)	:		
7)			
•	•		

PATENT REEL: 045154 FRAME: 0712

RECORDED: 03/09/2018

3737940-1