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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT6106432

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JUN ENDO	05/13/2020
JUNICHI HASHIMOTO	05/11/2020
SHOZO OTERA	05/13/2020
TORU TOMINAGA	05/12/2020

RECEIVING PARTY DATA

Name:	MURATA MANUFACTURING CO., LTD.	
Street Address:	10-1, HIGASHIKOTARI 1-CHOME	
City:	NAGAOKAKYO-SHI, KYOTO-FU	
State/Country:	JAPAN	
Postal Code:	617-8555	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15931846

CORRESPONDENCE DATA

Fax Number: (202)857-6395

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: 202-857-6000

Email: patentdocket@arentfox.com, inga.hildreth@arentfox.com

ARENT FOX LLP - NEW YORK **Correspondent Name:**

1717 K STREET, NW Address Line 1:

Address Line 4: WASHINGTON, D.C. 20006-5344

ATTORNEY DOCKET NUMBER:	036433.04276	
NAME OF SUBMITTER:	INGA HILDRETH	
SIGNATURE:	/IH/	
DATE SIGNED:	05/14/2020	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 4

source=036433_04276_Endo#page1.tif

PATENT REEL: 052661 FRAME: 0647 source=036433_04276_Hashimoto#page1.tif source=036433_04276_Otera#page1.tif source=036433_04276_Tominaga#page1.tif

> PATENT REEL: 052661 FRAME: 0648

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT Title of VIBRATION DEVICE Invention As the below named inventor, I declare that: This declaration is directed to: x The attached application, or United States application or PCT international application number The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understand the contents of the above-identified application, including the claims. I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application. For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, as assignor, hereby sell, assign and set over to Murata Manufacturing Co., Ltd., having an address at 10-1, Higashikotari 1-chome, Nagaokakyo-shi, Kyoto-fu 617-8555, Japan, as assignee, the entire right, title and interest for the United States and all other countries in and to all inventions disclosed and/or claimed in the above-identified application, all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States and all other countries, including all rights of priority from the filing of said application, and all rights for past infringement, and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said inventions or resulting there from to said assignee herein, as assignee of the entire interest therein; and the undersigned for myself and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all divisional, continuation, reissue and other applications for Patent on said inventions and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said inventions, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to assist assignee, its successors, assigns and nominees to obtain patent protection for said inventions in the United States and all other countries, the expenses incident to said applications to be bome and paid by said assignee. The undersigned hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment. All statements made herein of my/our own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both, and may jeopardize the validity of the application or any patent issuing thereon. LEGAL NAME OF INVENTOR Date: May 13, 2020 Jun Endo Inventor: / Jun Endo / **Signature:

** An electronic S-signature is permitted. The S-signature must consist only of letters, or Arabic numerals, or both, with appropriate spaces and commas, periods, apostrophes, or hyphens for punctuation, and the person signing the correspondence must insert his or her own S-signature with a first single forward slash mark before and a second single forward slash mark after the S-signature (e.g., /Dr. James T. Jones, Jr./).

Initial 10/02/12Page # 1

Title of Invention VIBRATION DEVICE As the below named inventor, I declare that: This declaration is directed to: x The attached application, or		
This declaration is directed to:		
is directed to:		
§ 9		
United States application or PCT international application number filed on		
The above-identified application was made or authorized to be made by ma		
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application		
I have reviewed and understand the contents of the above-identified application, including the claims.		
i acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFB 1.56, including for continuation-in-part applications, material information which becams available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.		
For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, as assignor, hereby sell, assign and set over to Murata Manufacturing Co., Ltd. , having an address at 10-1, Higashikotari 1-chome. Nagaokakyo-shi, Kyoto-fu 617-8555. Japan, as assignee, the entire right, title and interest for the United States and all other countries in and to all inventions disclosed and/or claimed in the above-identified application, all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States and all other countries, including all rights of priority from the filling of said application, and all rights for past infringement, and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said inventions or resulting there from to said assignee herein, as assignee of the entire interest therein; and the undersigned for myself and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all divisional, continuation, reissue and other applications for Patent on said inventions and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said inventions, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to assist assignee, its successors, assigns and nominees to obtain patent protection for said inventions in the United States and all other countries, the expenses incident to said applications to be borne and paid by said assignee.		
The undersigned hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.		
All statements made herein of my/our own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that wilful false statements and the like are punishable under 18 U.S.C. 1901 by fine or imprisonment of not more than five (6) years, or both, and may jeopardize the validity of the application or any patent issuing thereon.		
LEGAL NAME OF INVENTOR		
Inventor: Junichi Hashimoto Date : May 11 5 2020		
+Signature Tunichi Hashimoto		

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Initial 10/02/12

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Title of VIBRATION DEVICE Invention		
As the below named inventor, I declare that:		
This declaration is directed to: x The attached application, or		
United States application or PCT international application number		
The above-identified application was made or authorized to be made by me.		
I helieve that I am the original inventor or an original joint inventor of a claimed invention in the application.		
I have reviewed and understand the contents of the above-identified application, including the claims.		
I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the continuation-in-part application.		
For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, as assignor, hereby sell, assign and set over to Murata Manufacturing Co., Ltd., having an address at 10-1, Higashikotari 1-chome, Nagackakyo-shi, Kyoto-fu 617-8555, Jepan, as assignee, the entire right, title and interest for the United States and all other countries in and to all inventions disclosed and/or claimed in the above-identified application, all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States and all other countries, including all rights of priority from the filing of said application, and all rights for past infringement, and the Commissioner of Patenis and Trademarks is hereby authorized and requested to issue all patents on said inventions or resulting there from to said assignee herein, as assignee of the entire interest therein and the undersigned for myself and my legal representatives, heirs and assigns do hereby agree and coverant without further remuneration, to execute and deliver all divisional, continuation, reissue and other applications for Patent on said inventions and all assignments thereof to said assignee or its assigns. To communicate to said assignee or its representatives all facts known to the undersigned respecting said inventions, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful caths, and to do generally everything necessary to assist assignee, its successors, assigns and nominees to obtain patent protection for said inventions in the United States and all other countries the expenses incident to said applications to be borne and paid by said assignee.		
The undersigned hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.		
All statements made herein of my/our own knowledge are true, all statements meds herein on information and belief are believed to be true, and further that these statements were made with the knowledge that wilful false statements and the like are punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both, and may jeopardize the validity of the application or any patent issuing thereon.		
LEGAL NAME OF INVENTOR		
Inventor: Shozo Otera Date : 13 May 2020		
**Signature <u>Shize O404</u>		

"An electronic S-signature is permitted. The S-signature must consist only of letters, or Arabic numerals, or both, with appropriate spaces and commas, periods, apostrophes, or hyphens for punctuation, and the person signing the correspondence must insert his or her pwn S-signature with a first single forward slash mark before and a second single forward slash mark after the S-signature (e.g., //Dr. James T. Jones, Jr./).

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RECORDED: 05/14/2020