

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
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EPAS ID: PAT3431749

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KEISUKE KATABUCHI	07/02/2015
TETSUO TANIGUCHI	07/02/2015
YASUSHI YUNOKI	07/02/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MURATA MANUFACTURING CO., LTD.
<b>Street Address:</b>	10-1, HIGASHIKOTARI 1-CHOME
<b>Internal Address:</b>	NAGAOAKAKYO-SHI
<b>City:</b>	KYOTO
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	617-8555
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14795217
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	MURATA-54569
<b>NAME OF SUBMITTER:</b>	AARON A. FISHMAN
<b>SIGNATURE:</b>	/Aaron A. Fishman/
<b>DATE SIGNED:</b>	07/09/2015
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 3</b>	

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**DECLARATION AND ASSIGNMENT  
FOR US UTILITY OR DESIGN PATENT APPLICATION**

Attorney Docket No.: MURATA-54569

**As a below-named inventor, I hereby declare that:**

this declaration is directed to the application entitled:

DIRECTIONAL COUPLER

(check only one item below)

attached hereto,

OR

filed on (YYYY/MM/DD) \_\_\_\_\_ as United States Application Number or  
PCT International Application Number \_\_\_\_\_.

The above-identified application was made or authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the above-identified application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WHEREAS, new and useful improvements have been made by the undersigned as described in the above-identified application.

WHEREAS, Murata Manufacturing Co., Ltd. having a place of business at 10-1, Higashikotari 1-chome, Nagaokakyo-shi, Kyoto, 617-8555, Japan, hereafter referred to as "assignee", is desirous of acquiring all right, title, and interest throughout the world in, to, and under said improvements and inventions and patent rights therefor.

NOW, THEREFORE, be it known that, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, all right, title, and interest, in the United States and throughout the world, in, to and under said improvements and inventions and all patents, patent applications, patent rights, and inventors' certificates thereof, therefor, and therein, including without limitation said application for patent in the United States, all divisions and continuations thereof, all patents which may be granted thereon, all reissues and extensions thereof, all right to sue for past infringement thereunder, all patents which may be granted for said improvements and inventions by states or nations other than the United States, or by other authority, entity, or organization, and all applications therefor, have been and are hereby sold, assigned, transferred, and delivered unto assignee, its successors and assigns by the undersigned; and it is covenanted and agreed by the undersigned, and for executors, administrators, and legal representatives of the undersigned, that at assignee's

request any and all applications, affidavits, assignments, and other instruments will be made, executed, and delivered as may be necessary, or desirable to secure for or vest in assignee, its successors or assigns, any improvement, inventions, right, title, interest, application, patent, patent right or other right or property covered by this assignment, and the United States Commissioner of Patents and Trademarks is hereby requested and authorized to issue any and all United States patents granted on any of said applications to assignee as owner of the entire right, title, and interest in, to, and under the same, and appropriately empowered officials of foreign countries are hereby authorized to issue any letters patent granted on any of said applications to assignee as owner of the entire right, title and interest in, to, and under the same.

IN WITNESS WHEREOF, this declaration and assignment has been executed below by the undersigned:

Legal Name of Inventor: Keisuke Katabuchi

Signature of Inventor: K. Katabuchi

Date: 2nd. Jul. 2015

Signatures of additional inventors on attached sheet(s)

**Notice to Inventor(s):** A person may not execute this declaration unless that person has reviewed and understands the contents of the above-identified application, including the claims.

**Notice to Inventor(s):** A person may not execute this declaration unless that person is aware of the duty to disclose to the US Patent and Trademark Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

**Additional Inventor(s)**

Legal Name of Inventor: Tetsuo Taniguchi

Signature of Inventor: Tetsuo Taniguchi

Date: 2nd . July . 2015

Legal Name of Inventor: Yasushi Yunoki

Signature of Inventor: Yasushi Yunoki

Date: 2nd . July . 2015