

## PATENT ASSIGNMENT COVER SHEET

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<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
mitsubishi electric R&D centre europe B.V.	08/25/2016
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<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15315692
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<b>SIGNATURE:</b>	/Christopher Smith/
<b>DATE SIGNED:</b>	12/02/2016
<b>Total Attachments: 2</b>	
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ASSIGNMENT

WHEREAS, MITSUBISHI ELECTRIC R&D CENTRE EUROPE B.V. (hereinafter Assignor), a corporation organized and existing under and by virtue of the laws of the Netherlands, having an office at Capronilaan 46, NS Schiphol Rijk, NL-1119, Netherlands, is the owner of the entire right, title and interest in and to the following listed Patent Application in the United States by previous assignment(s);

U.S. Application No. 15/315,692, filed 01-DEC-2016

PCT International Appln. No. PCT/JP2015/003686 filed on July 23, 2015

WHEREAS, MITSUBISHI ELECTRIC CORPORATION (hereinafter Assignee), a corporation organized and existing under and by virtue of the laws of Japan, having an office at 7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, Japan, is desirous of acquiring the entire right, title and interest in and to the invention(s) described and claimed in said Patent Application;

NOW, THEREFORE, for good and valuable consideration, the receipt of and sufficiency of which are hereby acknowledged, said Assignor has sold, assigned and transferred and does hereby sell, assign and transfer unto said Assignee, its successors and assigns, its entire undivided right, title and interest in and to the said Patent Application and the invention(s) therein contained, including the right to sue for past infringement, to be held and enjoyed by said Assignee, its successors and assigns, the same as it would have been held and enjoyed by said Assignor if this assignment and sale had not been made.

Said Assignor hereby represents and warrants that there are no rights or interests outstanding inconsistent with the rights and interest granted herein and that said Assignor will not execute any instrument or grant or transfer any rights or interests inconsistent therewith, and said Assignor binds itself and its heirs, executors, administrators, employees and legal representatives, as the case may be, to execute and deliver to said Assignee, its successors and assigns, any further documents or

instruments and do any and all further acts that may be deemed necessary by said Assignee, its successors and assigns, to file applications for improvements and inventions in any country where it may elect to file such applications, and that may be necessary to vest in said Assignee, its successors and assigns, the title herein conveyed, or intended so to be, and to enable such title to be recorded in the United States and foreign countries where such application or applications may be filed.

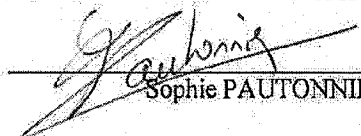
AND, said Assignor further covenants and agrees, in consideration of the premises, that it, its executors and administrators, will, at any time upon request, communicate to said Assignee, its successors and assigns, any facts relating to the said invention and improvements and the history thereof, known to it or its successors and assigns, and that it will testify as to the same in any interference or other proceeding when requested to do so by said Assignee, its successors and assigns.

The undersigned hereby grants the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF, said Assignor has hereunto set its seal this 25<sup>th</sup> day of August, 2016.

MITSUBISHI ELECTRIC R&D CENTRE EUROPE  
B.V.,

By:

  
\_\_\_\_\_  
Sophie PAUTONNIER

Title: Head of Intellectual Property and  
External Partnerships