

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Jesse W. Edwards</td> <td>05/06/2013</td> </tr> <tr> <td>M. Sean June</td> <td>05/06/2013</td> </tr> <tr> <td>Robert Joseph Therrien</td> <td>05/06/2013</td> </tr> <tr> <td>Abhishek Yadav</td> <td>05/06/2013</td> </tr> </tbody> </table>		Name	Execution Date	Jesse W. Edwards	05/06/2013	M. Sean June	05/06/2013	Robert Joseph Therrien	05/06/2013	Abhishek Yadav	05/06/2013
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Jesse W. Edwards	05/06/2013										
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Robert Joseph Therrien	05/06/2013										
Abhishek Yadav	05/06/2013										
RECEIVING PARTY DATA											
Name:	Phononic Devices, Inc.										
Street Address:	800 Capitola Drive										
Internal Address:	Suite 7										
City:	Durham										
State/Country:	NORTH CAROLINA										
Postal Code:	27713										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13888799</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13888799						
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Application Number:	13888799										
CORRESPONDENCE DATA											
Fax Number:	9192382301										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
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Correspondent Name:	WITHROW & TERRANOVA, P.L.L.C.										
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ATTORNEY DOCKET NUMBER:	1242-018C5										
NAME OF SUBMITTER:	Julie Smith										

OP \$40.00 13888799

Signature:	/Julie Smith/
Date:	05/07/2013
Total Attachments: 4 source=1242-018C5_Assignment#page1.tif source=1242-018C5_Assignment#page2.tif source=1242-018C5_Assignment#page3.tif source=1242-018C5_Assignment#page4.tif	

ASSIGNMENT

This Assignment made by us, **Jesse W. Edwards**, a citizen of the United States of America, residing at 33107 Havers Dr., City of Cary, State of North Carolina; **M. Sean June**, a citizen of the United States of America, residing at 5629 Barham Ct., City of Raleigh, State of North Carolina; **Robert Joseph Therrien**, a citizen of the United States of America, residing at 615 Rye Ridge Road, City of Cary, State of North Carolina; and **Abhishek Yadav**, a citizen of India, residing at 8928 Langwood Dr., Apt. 104, City of Raleigh, State of North Carolina, hereinafter referred to as assignors.

WITNESSETH: That,

WHEREAS, we are joint inventors of certain new and useful improvements in **THERMOELECTRIC HEAT EXCHANGE SYSTEM COMPRISING CASCADED COLD SIDE HEAT SINKS**, which is a Continuation of U.S. Patent Application Serial Number 13/836,525 filed March 15, 2013 and which also claims priority to Provisional Patent Application Serial Number 61/643,622 filed May 7, 2012; Provisional Patent Application Serial Number 61/643,625 filed May 7, 2012; Provisional Patent Application Serial Number 61/643,628 filed May 7, 2012; Provisional Patent Application Serial Number 61/643,631 filed May 7, 2012; Provisional Patent Application Serial Number 61/643,635 filed May 7, 2012; Provisional Patent Application Serial Number 61/643,640 filed May 7, 2012; Provisional Patent Application Serial Number 61/643,644 filed May 7, 2012; Provisional Patent Application Serial Number 61/643,646 filed May 7, 2012; Provisional Patent Application Serial Number 61/643,649 filed May 7, 2012; Provisional Patent Application Serial Number 61/716,882 filed October 22, 2012; Provisional Patent Application Serial Number 61/716,885 filed October 22, 2012; and Provisional Patent Application Serial Number 61/739,239 filed December 19, 2012,

for which we are about to make application for Letters Patent of the United States, and for which we have executed a declaration.

WHEREAS, Phononic Devices, Inc., a corporation duly organized and existing under the laws of the State of North Carolina and having a principal place of business at 800 Capitola Drive, Suite 7, City of Durham, State of North Carolina 27713, hereinafter referred to as assignee, is desirous of acquiring our entire right, title and interest in and to said invention as described in the specification executed by us concurrently herewith, and any and all Letters Patent which shall be granted therefor;

NOW, THEREFORE, To All Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over unto the said assignee, its successors and assigns, our entire right, title and interest in and to the above-mentioned application and invention and in and to any and all Letters Patent of the United States which may hereafter be granted therefor, and in any and to any and all continuations, continuations-in-part, substitutions, divisions or reissues of said Letters Patent, the same to be held and enjoyed by the said assignee, for its interest, and for its own use and behalf, and the use and behalf of its successors and assigns, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by us had this assignment and sale not been made.

And for the consideration aforesaid, we hereby covenant and agree to and with the said assignee, its successors and assigns, that at the time of the execution and delivery of these presents we are the joint and lawful owners of our entire right, title and interest in and to the invention, application and Letters Patent above-mentioned and that the same are unencumbered,

and that we have good right and lawful authority to sell and convey the same in the manner herein set forth.

And for the consideration aforesaid, we hereby covenant and agree to and with the said assignee, its successors and assigns, that we will, whenever its counsel or the counsel of its successors and assigns, learned in the law, shall advise that an amendment, division, continuation, continuation-in-part, or substitution of, or any other proceeding in connection with said application, including interference proceedings, is lawful and desirable, sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for the procurement of valid Letters Patent for said invention, or for the reissue of the same without charge to our said assignee, its successors or assigns, but at its or their expense.

We hereby request the Commissioner for Patents to issue the Letters Patent in accordance with this instrument.

For the consideration aforesaid, we have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto the said assignee, its successors, assigns or nominee, our entire right, title and interest in and to any and all Letters Patent for said invention which may be granted in countries foreign to the United States and in and to any applications for Letters Patent which may be filed for said invention in countries foreign to the United States and in and to the invention described in said application; and we hereby authorize and empower the said assignee, its successors, assigns or nominees to apply for Letters Patent or other form of protection on said invention in its own name or in the name of its successor, assignee, or nominee, in any and all countries where it may desire to file such application and where said application may be filed by another than the inventor; and we hereby covenant and agree to sign all papers and drawings, take all rightful oaths, and do all acts necessary or required

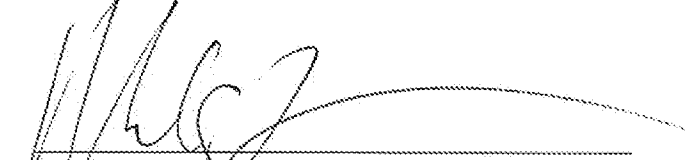
to be done for procurement of Letters Patent, or other form of protection, for said invention or inventions in countries foreign to the United States, and for further investing or confirming the right and title therein to the assignee, its successors, assignee, or nominee, without charge to our said assignee, its successor, assignee or nominee, but at its or their expense.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

5/6/2013
Date


Jesse W. Edwards

5/6/2013
Date


M. Sean June

5/6/2013
Date


Robert Joseph Therrien

5/6/2013
Date


Abhishek Yadav