

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT2681207

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT										
NATURE OF CONVEYANCE:	Corrective Assignment to correct the SECOND ASSIGNOR'S LAST NAME previously recorded on Reel 031308 Frame 0081. Assignor(s) hereby confirms the SECOND ASSIGNOR'S LAST NAME IS "HIBINO" NOT "HIBINIO".										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>TAKASHI EBIGASE</td> <td>09/26/2013</td> </tr> <tr> <td>TOMOHIKO HIBINO</td> <td>09/27/2013</td> </tr> </tbody> </table>		Name	Execution Date	TAKASHI EBIGASE	09/26/2013	TOMOHIKO HIBINO	09/27/2013				
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TOMOHIKO HIBINO	09/27/2013										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>NGK INSULATORS, LTD.</td> </tr> <tr> <td>Street Address:</td> <td>2-56, SUDA-CHO, MIZUHO-KU</td> </tr> <tr> <td>City:</td> <td>NAGOYA-SHI, AICHI-KEN</td> </tr> <tr> <td>State/Country:</td> <td>JAPAN</td> </tr> <tr> <td>Postal Code:</td> <td>467-8530</td> </tr> </table>		Name:	NGK INSULATORS, LTD.	Street Address:	2-56, SUDA-CHO, MIZUHO-KU	City:	NAGOYA-SHI, AICHI-KEN	State/Country:	JAPAN	Postal Code:	467-8530
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Application Number:	14041114										
CORRESPONDENCE DATA											
Fax Number:	(315)233-8320										
Phone:	(315) 233-8300										
Email:	lvanantwerp@burrandbrown.com										
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>											
Correspondent Name:	STEPHEN P. BURR										
Address Line 1:	BURR & BROWN										
Address Line 2:	P.O. BOX 7068										
Address Line 4:	SYRACUSE, NEW YORK 13261-7068										
ATTORNEY DOCKET NUMBER:	962_009										
NAME OF SUBMITTER:	STEPHEN P. BURR										
Signature:	/SPBurr/										

PATENT

Date:

01/14/2014

Total Attachments: 4

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## PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
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CORRESPONDENCE DATA											
<p>Fax Number: 3152338320  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 315-233-8300        Email: lvanantwerp@burrandbrown.com        Correspondent Name: BURR &amp; BROWN        Address Line 1: PO BOX 7068        Address Line 4: SYRACUSE, NEW YORK 13261-7068</p>											
ATTORNEY DOCKET NUMBER:	962_009										
NAME OF SUBMITTER:	Stephen P. Burr										
Signature:	/SPBurr/										
Date:	09/30/2013										
<p>Total Attachments: 2        source=Assignment#page1.tif        source=Assignment#page2.tif</p>											

CH \$40.00 14041114

ASSIGNMENT FOR US PATENT APPLICATIONS AND US PATENTS

WHEREAS, the undersigned inventors, Takashi EBIGASE of Nagoya-shi, Aichi-ken, Japan and Tomohiko HIBINO of Nagoya-shi, Aichi-ken, Japan (hereinafter referred to as "the Assignors"), have invented certain new and useful improvements in "METHOD FOR MANUFACTURING PIEZOELECTRIC SUBSTRATE", and are the joint owner of the entire right, title and interest in and to said improvements;

WHEREAS, NGK Insulators, LTD., a corporation duly organized under the laws of Japan, and having a principal place of business at 2-56, Suda-cho, Mizuho-ku, Nagoya-shi, Aichi-ken, Japan (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title and interest of the Assignor in and to said improvements;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, do hereby sell, assign, transfer, and set over, unto the Assignee, its successors, and legal representatives, the entire right, title, and interest of the Assignors in and to the above-mentioned improvements, the above-mentioned entire right, title and interest of the Assignors include the entire right, title and interest in and to any Japanese patent applications based on said improvements, in and to any and all Japanese Patents that may be granted therefor and thereon, in and to any patent applications based on said improvements that may be filed to the United States of America (hereinafter "US"), in and to any and all US Patents that may be granted therefor and thereon, in and to any and all applications claiming priority to said applications, in and to any divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, and legal representatives to the full end of the term or terms for which Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND the Assignors hereby confirm that the Assignee has filed Japanese patent application for said improvements on March 30, 2011 to which serial No. 2011-076265 has been assigned, and is entitled to file any US patent applications based on said improvements;

AND for the same consideration, the Assignors hereby covenant to and agree with the Assignee, its successors and legal representatives, that, at the time of execution and delivery of these presents, the Assignor is the sole and lawful owner of their entire right, title, and interest in and to the improvements set forth in said above-mentioned application, and that the same right, title, and interest are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant to and agree with the Assignee, its successors, and legal representatives that the Assignor will, whenever counsel of the Assignee, or the counsel of its successors, and legal representatives, shall advise that any proceeding in connection with said improvements or said applications for Patents, or any proceeding in connection with US Patents for said improvements in the United States of America, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Patents, or any reissue or extension of any Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths,

and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Patents for said improvements, without charge to the Assignee, its successors, and legal representatives, but at the cost and expense of the Assignee, their successors, and legal representatives;

AND Assignors hereby authorize the Assignee, its successors and legal representatives, or anyone it may properly designate, to insert below the filing date and serial number of said US patent application, when said filing date and serial number become available:

US Patent Application Serial No. \_\_\_\_\_ Filing Date \_\_\_\_\_;

AND the Assignors hereby request the Commissioner of Patents and Trademarks to issue any and all said US Patents that may be granted upon any of the above-mentioned applications, in the name of the Assignee, for the sole use and behalf of the Assignee, its successors, and legal representatives.

Date: sep. 26, 2013 Name of Assignor Takashi Ebigase  
Takashi EBIGASE

Date: Sep. 27, 2013 Name of Assignor Tomohiko Hibino  
Tomohiko HIBINO