

## 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>Thomas Joel Blackburn</td> <td>01/10/2012</td> </tr> <tr> <td>Thomas McIntyre</td> <td>01/09/2012</td> </tr> <tr> <td>Fernando Gustavo Tomasel</td> <td>01/12/2012</td> </tr> </tbody> </table>	Name	Execution Date	Thomas Joel Blackburn	01/10/2012	Thomas McIntyre	01/09/2012	Fernando Gustavo Tomasel	01/12/2012	
Name	Execution Date								
Thomas Joel Blackburn	01/10/2012								
Thomas McIntyre	01/09/2012								
Fernando Gustavo Tomasel	01/12/2012								
RECEIVING PARTY DATA									
Name:	Advanced Energy Industries, Inc.								
Street Address:	1625 Sharp Point Drive								
City:	Fort Collins								
State/Country:	COLORADO								
Postal Code:	80525								
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>13343576</td> </tr> </tbody> </table>	Property Type	Number	Application Number:	13343576					
Property Type	Number								
Application Number:	13343576								
CORRESPONDENCE DATA									
Fax Number:	(720)536-4910								
Phone:	720.536.4900								
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<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>									
Correspondent Name:	Neugeboren O'Dowd PC								
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ATTORNEY DOCKET NUMBER:	AE2010-022US								
NAME OF SUBMITTER:	Stephen S. Gruber								
Total Attachments: 2 source=AE2010-022US_Assignment_Signed_01102012#page1.tif source=AE2010-022US_Assignment_Signed_01102012#page2.tif									

CH \$40.00 13343576

# ASSIGNMENT OF PATENT APPLICATION

FOR GOOD AND VALUABLE CONSIDERATION,

We, the undersigned (each) have agreed and hereby agree to assign for good and valuable consideration, receipt of which is hereby expressly acknowledged, and do hereby sell, assign and transfer unto

Advanced Energy Industries, Inc.

a corporation organized under the laws of the state of Delaware as Assignee, and its successors, assigns and legal representatives, the entire right, title and interest, for all countries in and to certain inventions relating to

## SYSTEM LEVEL POWER DELIVERY TO A PLASMA PROCESSING LOAD

described in an application for Letters Patent of the United States, identified as Attorney Docket No. AE2010.022US, at Neugeboren O'Dowd PC, 1227 Spruce Street, Suite 200, Boulder, CO 80302 and filed on 01/04/2012, as Application Serial No. 13/343,576, and the invention(s) and improvement(s) set forth therein, and any and all continuations, continuations-in-part, divisionals, and renewals of and substitutes for said application for said Letters Patent, and all the rights and privileges under any and all Letters Patent that may be granted therefore in any country, and any reissues, or reexaminations, or extensions of said Letters Patent. We request that any and all Letters Patent for said inventions be issued to said Assignee, its successors, assigns and legal representatives, or to such nominees as it may designate.

We agree that, when requested, we will, without charge to said Assignee but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in said Assignee, its successors, assigns and legal representatives or nominees.

We authorize and empower the said Assignee, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from us.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said Assignee or nominee to claim the aforesaid benefit of the right of priority provided by the International convention which may henceforth be substituted for it.

We hereby authorize Sean R. O'Dowd, attorney for Assignee, to insert the filing date and Serial number into the first paragraph of this assignment, after the application for Letters Patent has been filed, and the U.S. Patent Office has assigned such application a Serial Number.

We covenant with said Assignee, its successors, assigns and legal representatives, that the rights and property herein conveyed are free and clear of any encumbrance, and that we have full right to convey the same as herein expressed.

IN WITNESS WHEREOF, we have hereunto signed our names on the day and year set forth below.

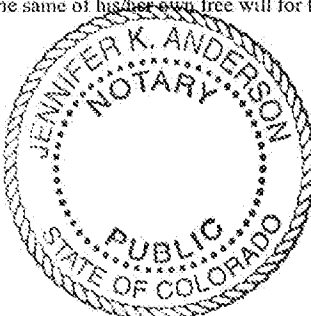
Thomas Joel Blackburn  
Inventor's Signature

1/10/12  
DATE

Thomas Joel Blackburn  
Inventor's Printed Name

STATE OF \_\_\_\_\_ )  
 ) SS  
COUNTY OF \_\_\_\_\_ )

On this 10 day of January, 2012, before me personally came the above named Joel Blackburn who is personally known by me or proved to me on the basis of satisfactory evidence to be the same individual who executed the foregoing assignment, and who acknowledged to me that he/she executed the same of his/her own free will for the use and purposes therein set forth.

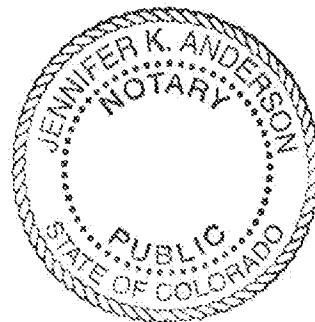


My Commission Expires 09/23/2013

Jennifer K Anderson  
NOTARY PUBLIC  
My Commission Expires: 9-23-2013

Thomas McIntyre  
Inventor's Signature

1-9-12  
DATE



My Commission Expires 09/23/2013

Thomas McIntyre  
Inventor's Printed Name

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) SS

On this 9th day of January, 2012, before me personally came the above named Thomas McIntyre who is personally known by me or proved to me on the basis of satisfactory evidence to be the same individual who executed the foregoing assignment, and who acknowledged to me that he/she executed the same of his/her own free will for the use and purposes therein set forth.

Jennifer K. Anderson  
NOTARY PUBLIC  
My Commission Expires: 9-23-2013

Fernando Gustavo Tomasel  
Inventor's Signature

1/12/12  
DATE

Fernando Gustavo Tomasel  
Inventor's Printed Name

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) SS

On this 12th day of January, 2012, before me personally came the above named Fernando Gustavo Tomasel who is personally known by me or proved to me on the basis of satisfactory evidence to be the same individual who executed the foregoing assignment, and who acknowledged to me that he/she executed the same of his/her own free will for the use and purposes therein set forth.

Jennifer K. Anderson  
NOTARY PUBLIC  
My Commission Expires: 9-23-2013