

05-03-2005

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To the Director of the U.S. Patent

ments or the new address(es) below.

1. Name of conveying party(ies)/Execution Date(s):  
Gideon J. van Zyl

2. Name and address of receiving party(ies)

Name: Advanced Energy Industries, Inc.

Internal Address: \_\_\_\_\_

Execution Date(s) April 22, 2005

Additional name(s) of conveying party(ies) attached?  Yes  No

Street Address: 1625 Sharp Point Drive

3. Nature of conveyance:

- Assignment  Merger
- Security Agreement  Change of Name
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other \_\_\_\_\_

City: Fort Collins

State: CO

Country: US Zip: 80525

Additional name(s) & address(es) attached?  Yes  No

4. Application or patent number(s):

This document is being filed together with a new application.

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached?  Yes  No

5. Name and address to whom correspondence concerning document should be mailed:

Name: John D. Pirnot

Advanced Energy Industries, Inc.

Internal Address: \_\_\_\_\_

Street Address: 1625 Sharp Point Drive

City: Fort Collins

State: CO Zip: 80525

Phone Number: 970-407-6326

Fax Number: 970-407-5326

Email Address: jd.pirnot@aei.com

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00

- Authorized to be charged by credit card
- Authorized to be charged to deposit account
- Enclosed
- None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers \_\_\_\_\_  
Expiration Date \_\_\_\_\_

b. Deposit Account Number 501539

Authorized User Name John D. Pirnot

9. Signature: \_\_\_\_\_

Signature

April 22, 2005

Date

John D. Pirnot

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

3



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Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

## ASSIGNMENT OF PATENT APPLICATION

I, the undersigned 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

Arc Detection and Handling in Radio Frequency Power Applications

described in an application for Letters Patent of the United States, identified as Attorney Docket No. AE2004-045, at Advanced Energy Industries, Inc., 1625 Sharp Point Drive, Fort Collins, CO 80525, 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 therefor in any country, and any reissues, or reexaminations, or extensions of said Letters Patent. I 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.

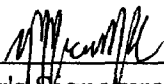
I agree that, when requested, I will, without charge to said Assignee but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto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

I 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.

I 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.

I 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 I have full right to convey the same as herein expressed.

IN WITNESS WHEREOF, I have hereunto signed my name on the day and year set forth below.


  
\_\_\_\_\_  
Inventor's Signature

4/22/2005  
\_\_\_\_\_  
DATE

Gideon J. van Zyl  
\_\_\_\_\_  
Inventor's Printed Name

STATE OF COLORADO            )  
  ) SS  
COUNTY OF LARIMER         )

On this 22<sup>nd</sup> day of April, 2005, before me personally came the above named Gideon J. van Zyl 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.

  
\_\_\_\_\_  
NOTARY PUBLIC  
My Commission Expires 3/3/2006