503776373 04/09/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3823019

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DONALD F. MURRAY	12/23/2014

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

Property Type	Number
Application Number:	14757702

CORRESPONDENCE DATA

Fax Number: (720)536-4910

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 720.536.4900

Email: rene@nodiplaw.com

Correspondent Name: NEUGEBOREN O'DOWD PC Address Line 1: 1227 SPRUCE STREET

Address Line 2: SUITE 200

Address Line 4: BOULDER, COLORADO 80302

ATTORNEY DOCKET NUMBER:	AE2014-001US
NAME OF SUBMITTER:	SEAN R. O'DOWD
SIGNATURE:	/Sean R. O'Dowd/
DATE SIGNED:	04/09/2016

Total Attachments: 1

source=AE2014-001PROV_Assignment_Signed_12232014#page1.tif

PATENT 503776373 REEL: 038238 FRAME: 0017

ASSIGNMENT OF PATENT APPLICATION

FOR GOOD AND VALUABLE CONSIDERATION,

I, the undersigned hereby agrees 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

USE OF A FULLY-DIFFERENTIAL FRONT-END, WITH REVERSE BIAS AND BLIND DETECTION SUPPORT TO ACHIEVE A HIGH-SPEED, LOW NOISE, LOW OFFSET, HIGH-GAIN PYROMETER INTERFACE

described in an application for Letters Patent of the United States, identified as Attorney Docket No. <u>AE2014-001PROV</u>, at Neugeboren O'Dowd PC, 1227 Spruce Street, Suite 200, Boulder, CO 80302 and filed on <u>December 23, 2014</u>, as Application Serial No. <u>62096090</u>, 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 me.

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.

> PATENT REEL: 038238 FRAME: 0018

RECORDED: 04/09/2016