

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM399349

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	SECURITY INTEREST		
CONVEYING PARTY DATA			
Name	Formerly	Execution Date	Entity Type
POWER ANALYTICS CORPORATION		07/27/2016	Corporation: DELAWARE
RECEIVING PARTY DATA			
Name:	PACIFIC WESTERN BANK		
Street Address:	406 BLACKWELL STREET		
Internal Address:	SUITE 240		
City:	DURHAM		
State/Country:	NORTH CAROLINA		
Postal Code:	27701		
Entity Type:	STATE CHARTERED BANK: CALIFORNIA		
PROPERTY NUMBERS Total: 15			
Property Type	Number	Word Mark	
Serial Number:	78577838	POWER ANALYTICS	
Serial Number:	85485361	POWER ANALYTICS	
Serial Number:	85493423	POWER ANALYTICS	
Serial Number:	85494445	PA	
Serial Number:	87064484	POWER ANALYTICS WHOLE MICROGRID CONCEPT	
Serial Number:	87064490	POWER ANALYTICS ENERGY ALIGNMENT PLAN	
Serial Number:	85493439	PALADIN DESIGNBASE	
Serial Number:	86431539	DB XI	
Serial Number:	86431524	DESIGNBASE XI	
Serial Number:	86051979	PALADIN WSM	
Serial Number:	85484403	PALADIN SMARTGRID POWER MANAGEMENT SYSTE	
Serial Number:	85485377	FORESIGHT AS ACCURATE AS HINDSIGHT.	
Serial Number:	85608189	PALADIN GATEWAY	
Serial Number:	85561832	PALADIN DESIGNVIEW	
Serial Number:	85561792	PALADIN LIVE	
CORRESPONDENCE DATA			
Fax Number:	9193541278		

CH \$390.00 78577838

TRADEMARK

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: 919-314-3086
Email: diligencereview@square1bank.com
Correspondent Name: PACIFIC WESTERN BANK
Address Line 1: 406 BLACKWELL STREET
Address Line 2: SUITE 240
Address Line 4: DURHAM, NORTH CAROLINA 27701

NAME OF SUBMITTER:	NICHOLAS NANCE
SIGNATURE:	/NICHOLASNANCE/CCD
DATE SIGNED:	09/21/2016

Total Attachments: 9

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INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT is entered into as of July 27, 2016 by and between PACIFIC WESTERN BANK ("*Bank*") and POWER ANALYTICS CORPORATION, a Delaware corporation ("*Grantor*").

RECITALS

A. Bank has agreed to make certain advances of money and to extend certain financial accommodations to Grantor (the "Loans") in the amounts and manner set forth in that certain Loan and Security Agreement by and among Bank (as successor in interest by merger to Square 1 Bank), Power Generation Services, Inc. and Gridforce Energy Management, LLC, dated November 20, 2014, as amended by that certain First Amendment to Loan and Security Agreement dated as of March 23, 2015, that certain Second Amendment to Loan and Security Agreement dated as of November 19, 2015, that certain Third Amendment to Loan and Security Agreement dated as of December 11, 2015, and that certain Fourth Amendment to Loan and Security Agreement dated as of March 10, 2016, and as further amended and joined by Grantor pursuant to that certain Fifth Amendment and Joinder to Loan and Security Agreement dated as of even date herewith (as the same may be further amended, modified or supplemented from time to time, the "Loan Agreement"; capitalized terms used herein are used as defined in the Loan Agreement).

B. Bank is willing to extend and to continue to extend financial accommodations to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks and Patents to secure the obligations of Grantor under the Loan Agreement.

C. Pursuant to the terms of the Loan Agreement, Grantor has granted to Bank a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement and all other agreements now existing or hereafter arising between Grantor and Bank, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement and under any other agreement now existing or hereafter arising between Bank and Grantor, Grantor grants and pledges to Bank a security interest in all of Grantor's right, title and interest in, to and under its Intellectual Property (including without limitation those Copyrights, Patents and Trademarks listed on Exhibits A, B and C hereto), and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto

throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part thereof (collectively, "Intellectual Property Collateral").

This security interest is granted in conjunction with the security interest granted to Bank under the Loan Agreement. The rights and remedies of Bank with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Bank as a matter of law or equity. Each right, power and remedy of Bank provided for herein or in the Loan Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Bank of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Bank, of any or all other rights, powers or remedies.

Grantor represents and warrants that Exhibits A, B, and C attached hereto set forth any and all intellectual property rights in connection to which Grantor has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address of Grantor:

Power Analytics Corporation
9208 Falls of Neuse Road, Suite 215
Raleigh, NC 27615

POWER ANALYTICS CORPORATION

By: 

Name: TODD L. JACKSON

Title: CEO

BANK:

Address of Bank:

406 Blackwell Street, Suite 240
Durham, NC 27701
Attn: Legal Department

PACIFIC WESTERN BANK

By: _____

Name: _____

Title: _____

[Signature Page to Intellectual Property Security Agreement]

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address of Grantor:

POWER ANALYTICS CORPORATION

Power Analytics Corporation
9208 Falls of Neuse Road, Suite 215
Raleigh, NC 27615

By: _____

Name: _____

Title: _____

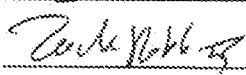
BANK:

Address of Bank:

PACIFIC WESTERN BANK

406 Blackwell Street, Suite 240
Durham, NC 27701
Attn: Legal Department

By:  _____

Name:  _____

Title:  _____

[Signature Page to Intellectual Property Security Agreement]

EXHIBIT A
COPYRIGHTS

None.

EXHIBIT B
PATENTS

Description	Registration OR Serial Number	Registration OR Filing Date
SYSTEMS AND METHODS FOR REAL-TIME SYSTEM MONITORING AND PREDICTIVE ANALYSIS	7,826,990	2007.02.14
SYSTEMS AND METHODS FOR REAL-TIME PROTECTIVE DEVICE EVALUATION IN AN ELECTRICAL POWER DISTRIBUTION SYSTEM	7,844,439	2007.03.12
SYSTEMS AND METHODS FOR PREDICTIVE MONITORING INCLUDING REAL-TIME STRENGTH AND SECURITY ANALYSIS IN AN ELECTRICAL POWER DISTRIBUTION SYSTEM	7,840,395	2007.04.12
ELECTRICAL POWER SYSTEM MODELING, DESIGN, ANALYSIS, AND REPORTING VIA A CLIENT-SERVER APPLICATION FRAMEWORK	8,229,722	2008.10.08
SYSTEMS AND METHODS FOR AUTOMATIC REAL-TIME CAPACITY ASSESSMENT FOR USE IN REAL-TIME POWER ANALYTICS OF AN ELECTRICAL POWER DISTRIBUTION SYSTEM	8,959,006	2007.04.12
AUTOMATIC REAL-TIME OPTIMIZATION AND INTELLIGENT CONTROL OF ELECTRICAL POWER DISTRIBUTION AND TRANSMISSION SYST	8,126,685	2007.06.28
SYSTEM FOR COMPARING REAL-TIME DATA AND MODELING ENGINE DATA TO PREDICT ARC FLASH EVENTS	7,729,808	2007.06.29
SYSTEMS AND METHODS FOR DETERMINING PROTECTIVE DEVICE CLEARING TIMES USED FOR PROVIDING REAL-TIME PREDICTIONS ABOUT ARC FLASH EVENTS	7,840,396	2007.07.06
SYSTEMS AND METHODS FOR REAL-TIME DYNAMIC SIMULATION OF UNINTERRUPTIBLE POWER SUPPLY SOLUTIONS AND THEIR CONTROL LOGIC SYSTEMS	7,844,440	2007.07.09
SYSTEMS AND METHODS FOR REAL-TIME ADVANCED VISUALIZATION FOR PREDICTING THE HEALTH, RELIABILITY AND PERFORMANCE OF AN ELECTRICAL POWER SYSTEM	8,170,856	2007.07.12
SYSTEMS AND METHODS FOR ALARM FILTERING AND MANAGEMENT WITHIN A REAL-TIME DATA ACQUISITION AND MONITORING ENVIRONMENT	7,693,608	2007.07.20
SYSTEMS AND METHODS FOR ALARM FILTERING AND MANAGEMENT WITHIN A REAL-TIME DATA ACQUISITION AND MONITORING ENVIRONMENT		

Description	Registration OR Serial Number	Registration OR Filing Date
SYSTEMS AND METHODS FOR A REAL-TIME SYNCHRONIZED ELECTRICAL POWER SYSTEM SIMULATOR FOR "WHAT-IF" ANALYSIS AND PREDICTION OVER ELECTRICAL POWER NETWORKS.	8180622	2012.05.12
SYSTEMS AND METHODS FOR CREATION OF A SCHEMATIC USER INTERFACE FOR MONITORING AND PREDICTING THE REAL-TIME HEALTH, RELIABILITY AND PERFORMANCE OF AN ELECTRICAL POWER SYSTEM	8,775,934	2008.05.07
REAL-TIME STABILITY INDEXING FOR INTELLIGENT ENERGY MONITORING AND MANAGEMENT OF ELECTRICAL POWER NETWORK SYSTEM	8,131,401	2008.09.23
SYSTEMS AND METHODS FOR AUTOMATICALLY CONVERTING CAD DRAWING FILES INTO INTELLIGENT OBJECTS WITH DATABASE CONNECTIVITY FOR THE DESIGN, ANALYSIS, AND SIMULATION OF ELECTRICAL POWER SYSTEMS	8,155,943	2008.10.08
METHOD FOR PREDICTING ARC FLASH ENERGY AND PPE CATEGORY WITHIN A REAL-TIME MONITORING SYSTEM	8,868,398	2008.10.10
REAL-TIME SYSTEM FOR VERIFICATION AND MONITORING OF PROTECTIVE DEVICE SETTINGS WITHIN AN ELECTRICAL POWER DISTRIBUTION NETWORK AND AUTOMATIC CORRECTION OF DEVIANCES FOUND	8,165,723	2008.12.12
METHOD FOR PREDICTING SYMMETRIC, AUTOMATED, REAL-TIME ARC FLASH ENERGY WITHIN A REAL-TIME MONITORING SYSTEM	8,494,830	2009.07.20
METHOD FOR PREDICTING POWER USAGE EFFECTIVENESS AND DATA CENTER INFRASTRUCTURE EFFICIENCY WITHIN A REAL-TIME MONITORING SYSTEM	8,401,833	2009.08.17
SYSTEMS AND METHODS FOR ALARM FILTERING AND MANAGEMENT WITHIN A REAL-TIME DATA ACQUISITION AND MONITORING ENVIRONMENT	8,577,661	2010.01.19
SYSTEMS AND METHODS FOR REAL-TIME SYSTEM MONITORING AND PREDICTIVE ANALYSIS	8,155,908	2010.04.13
SYSTEM FOR COMPARING REAL-TIME DATA AND MODELING ENGINE DATA TO PREDICT ARC FLASH EVENTS	8,688,429	2010.04.13
REAL TIME MICROGRID POWER ANALYTICS PORTAL FOR MISSION CRITICAL POWER SYSTEMS	8,321,194	2010.09.30
Method for predicting arc flash energy and PPE category within a real-time monitoring system	9,111,057	2014.09.25
Real-time predictive systems for intelligent energy monitoring and management of electrical power networks	9,031,824	2014.11.04
SYSTEMS AND METHODS FOR INTUITIVE MODELING OF	9,092,593	2008.09.25

Description	Registration OR Serial Number	Registration OR Filing Date
COMPLEX NETWORKS IN A DIGITAL ENVIRONMENT		
REAL-TIME PREDICTIVE SYSTEMS FOR INTELLIGENT ENERGY MONITORING AND MANAGEMENT OF ELECTRICAL POWER NETWORKS	12/121552	2015.05.15
SYSTEMS AND METHODS FOR REAL-TIME DC MICROGRID POWER ANALYTICS FOR MISSION-CRITICAL POWER SYSTEMS	14/597499	2015.01.15
Microgrid Model Based Automated Real Time Simulation for Market Based Electric Power System Optimization	14/617271	2015.02.09
Systems and Methods for Automatic Real-Time Capacity Assessment for Use in Real-Time Power Analytics of an Electrical Power Distribution System	14/617313	2015.02.09
Systems and Methods for Automated Model-Based Real-Time Simulation of a Microgrid for Market-Based Electric Power System Optimization	14/617333	2015.02.09
Method for Predicting Symmetric, Automated, Real-Time Arc Flash Energy Within a Real-Time Monitoring System	14/617370	2015.02.09
Systems and Methods for Real-Time Forecasting and Predicting of Electrical Peaks and Managing the Energy, Health, Reliability, and Performance of Electrical Power Systems Based on an Artificial Adaptive Neural Network	14/925227	2015.10.28

EXHIBIT C
TRADEMARKS

Description	Registration/ Application Number	Registration/ Application Date
POWER ANALYTICS	78577838	2005.03.01
POWER ANALYTICS	85485361	2011.12.01
POWER ANALYTICS	85493423	2011.10.12
PA (+ Design)	85494445	2011.12.13
POWER ANALYTICS WHOLE MICROGRID CONCEPT	87064484	2016.06.08
POWER ANALYTICS ENERGY ALIGNMENT PLAN	87064490	2016.06.08
PALADIN DESIGNBASE	85493439	2011.12.12
DB XI	86431539	2014.10.22
DESIGNBASE XI	86431524	2014.10.22
PALADIN WSM	86051979	2013.08.29
PALADIN SMARTGRID POWER MANAGEMENT SYSTEM	85484403	2011.11.30
FORESIGHT AS ACCURATE AS HINDSIGHT.	85485377	2011.12.01
PALADIN GATEWAY	85608189	2012.04.25
PALADIN DESIGNVIEW	85561832	2012.03.06
PALADIN LIVE	85561792	2012.03.06
P (+ Design)	85608189	2004.09.30
PALADIN SMARTGRID	85561832	2009.08.28
PALADIN	85561792	1996.05.20

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