# PATENT ASSIGNMENT

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | SECURITY AGREEMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|---|---|
| Power-One, Inc. | 03/29/2011 |

RECEIVING PARTY DATA

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|---|---|
| Name: | Bank of America, N.A. |
| Street Address: | 800 5th Avenue |
| Internal Address: | Floor 17 |
| City: | Seattle |
| State/Country: | WASHINGTON |
| Postal Code: | 98104 |

PROPERTY NUMBERS Total: 172

| Property Type | Number |
|---|---|
| Patent Number: | 7049677 |
| Patent Number: | 6958592 |
| Patent Number: | 7023190 |
| Patent Number: | 7315157 |
| Patent Number: | 7327149 |
| Patent Number: | 6204745 |
| Patent Number: | 7026664 |
| Patent Number: | 5636107 |
| Patent Number: | 7394445 |
| Patent Number: | 7646382 |
| Patent Number: | 7239115 |
| Patent Number: | 6850046 |
| Patent Number: | 6370047 |
| Patent Number: | 5715153 |

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| Patent Number: | 6195275 |
| Patent Number: | 6914348 |
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| Patent Number: | 6933709 |
| Patent Number: | 7394236 |
| Patent Number: | 7554310 |
| Patent Number: | 7834613 |
| Patent Number: | 7000125 |
| Patent Number: | 6788036 |
| Patent Number: | 7249267 |
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| Patent Number: | 7882372 |
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| Patent Number: | 7565559 |
| Patent Number: | 7782029 |
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| Patent Number: | 7333350 |
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| Patent Number: | D429213 |
| Patent Number: | D494538 |
| Application Number: | 11911358 |
| Application Number: | 10551592 |
| Application Number: | 12663499 |
| Application Number: | 11910828 |
| Application Number: | 11868269 |
| Application Number: | 11919043 |
| Application Number: | 11919042 |
| Application Number: | 11918970 |
| Application Number: | 11919016 |
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| Application Number: | 61252070 |
| Application Number: | 61252072 |
| Application Number: | 12623211 |
| Application Number: | 61299388 |
| Application Number: | 12707775 |
| Application Number: | 61312556 |
| Application Number: | 12754380 |
| Application Number: | 12740650 |

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| | 61329889 |
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| Application Number: | 12905707 |
| Application Number: | 61410032 |
| Application Number: | 12957162 |
| Application Number: | 61421402 |
| Application Number: | 61441486 |
| Application Number: | 61441490 |
| Application Number: | 61448856 |
| Application Number: | 12127726 |
| Application Number: | 11760660 |
| Patent Number: | 6657872 |
| Patent Number: | 6707288 |
| Application Number: | 12451682 |
| Patent Number: | 6970366 |

CORRESPONDENCE DATA


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| ATTORNEY DOCKET NUMBER: | 4452178-0433 |
| NAME OF SUBMITTER: | Safet Metjahic |

Total Attachments: 16
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# PATENT SECURITY AGREEMENT

**THIS PATENT SECURITY AGREEMENT** dated as of March 29, 2011 (this "Patent Security Agreement") is being entered into among **POWER-ONE, INC.**, a Delaware corporation (the "Borrower"), **EACH OF THE UNDERSIGNED U.S. SUBSIDIARIES OF THE BORROWER AND EACH OTHER PERSON WHO SHALL BECOME A PARTY HERETO BY EXECUTION OF A SECURITY JOINDER AGREEMENT** (each a "Guarantor" and, together with the Borrower, collectively, the "Grantors"), and **BANK OF AMERICA, N.A.**, as Administrative Agent (in such capacity, the "Administrative Agent") for each of the Secured Parties (as defined in the Credit Agreement referenced) below.

## RECITALS:

A. Pursuant to a Credit Agreement dated as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among the Borrower, the Administrative Agent, Bank of America, N.A., as L/C Issuer, and Swing Line Lender and the lenders now or hereafter party thereto (the "Lenders"), the Lenders have agreed to provide to the Borrower a revolving credit facility with a letter of credit sublimit and swing line facility.

B. Certain additional extensions of credit may be made from time to time for the benefit of the Grantors pursuant to certain Cash Management Agreements and Hedge Agreements (each as defined in the Credit Agreement).

C. Pursuant to the Security Agreement dated as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the "Security Agreement"), among the Grantors and the Administrative Agent, the Grantors have granted to the Administrative Agent, for the benefit of Secured Parties, a security interest in the Collateral, including all right, title and interest of Grantors in, to and under all patents, applications for patent, inventions and reissues, continuations, divisions and continuations-in-part in any of the foregoing owned by Grantors (the "Patents"), whether now owned or hereafter acquired.

D. It is a condition precedent to the Secured Parties' obligations to make and maintain such extensions of credit that the Grantors shall have executed and delivered this Patent Security Agreement to the Administrative Agent.

In order to induce the Secured Parties to from time to time make and maintain extensions of credit under the Credit Agreement and such Cash Management Agreements and Hedge Agreements, the parties hereto agree as follows:

SECTION 1. Defined Terms. Unless the context otherwise requires, all capitalized terms used-but not defined herein shall have the meanings set forth in the Credit Agreement.

SECTION 2. Incorporation of the Security Agreement. The Security Agreement and the terms and conditions thereof are hereby incorporated hereby in their entirety by this reference.

SECTION 3. Security Interest in Patents. As security for the payment and performance in full when due, of such Grantor's Obligations, each Grantor hereby grants to the Administrative Agent, and its permitted successors and assigns, for the ratable benefit of the Secured Parties, a security interest in all of such Grantor's right, title and interest in, to and under the Patents, whether now owned or hereafter acquired, including, without limitation: (i) the patents and patent applications set forth on Schedule A attached hereto, and (ii) all income, royalties and payments accrued, due or payable now or thereafter, including, without limitation, all claims for damages by reason of past, present or future infringement thereof, with the right to sue for, and collect the same.

SECTION 4. Counterparts. This Patent Security Agreement may be executed in any number of counterparts each of which when so executed and delivered shall be deemed an original, and it shall not be necessary in making proof of this Patent Security Agreement to produce or account for more than one such counterpart executed by the Grantor against whom enforcement is sought. Without limiting the foregoing provisions of this Section 4, the provisions of Section 10.10 of the Credit Agreement shall be applicable to this Patent Security Agreement.

SECTION 5. Governing Law. This Patent Security Agreement shall be construed in accordance with and governed by the laws of the State of New York.

*[Remainder of page intentionally left blank.]*

IN WITNESS WHEREOF, the parties hereto have duly executed this Patent Security Agreement as of the day and year first above written.

**GRANTOR:**

**POWER-ONE, INC.**

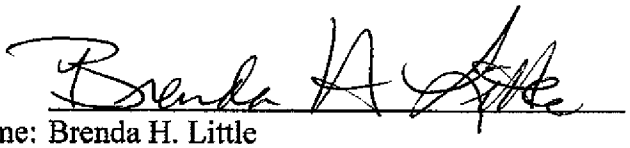
By: _____

Name: Gary R. Larsen

Title: Senior Vice President-Finance and Chief Financial Officer

**ADMINISTRATIVE AGENT:**

**BANK OF AMERICA, N.A.**, as Administrative Agent

By: 
Name: Brenda H. Little
Title: Vice President

# SCHEDULE A

## PATENT AND PATENT APPLICATIONS

| Title | Matter Code | Appl Type | Country | App Serial No. | Status | Patent No. | Date Issued |
|---|---|---|---|---|---|---|---|
| Low Cost Dielectric Isolation Method for Integration of Vertical Power MOSFET and Lateral Driver Devices | 003385 | UTL | US | 10/767,384 | ISSUED | 7,049,677 | 5/23/2006 |
| Dual-Output DC-DC Power Supply | 003781 | UTL | US | 763685 | ISSUED | 5715153 | 2/3/1998 |
| Adaptive Delay Control Circuit For Switched Mode Power Supply | 005398 | UTL | US | 10/724,509 | ISSUED | 6,958,592 | 10/25/2005 |
| ADC Transfer Function Providing Improved Dynamic Regulation in a Switched Mode Power Supply | 005414 | UTL | US | 10/779,475 | ISSUED | 7,023,190 | 4/4/2006 |
| ADC Transfer Function Providing Improvd Dynamic Regulation in a Switched Mode Power Supply | 005432 | UTL | US | 11/349,853 | ISSUED | 7,315,157 | 1/1/2008 |
| Bi-Directional MOS Current Sense Circuit | 005422 | UTL | US | 11/126,429 | ISSUED | 7,327,149 | 2/5/2008 |
| Continuous Multi-Turn Coils | 005412 | UTL | US | 09/440,378 | ISSUED | 6,204,745 | 3/20/2001 |
| DC-DC Converter Implemented in a Land Grid Array Package | 005403 | UTL | US | 10/423,603 | ISSUED | 7,026,664 | 4/11/2006 |
| DC-DC Converters | 005409 | UTL | US | 08/558,175 | ISSUED | 5,636,107 | 6/3/1997 |
| Digital Power Manager for Controlling and Monitoring an Array of Point-of-Load Regulators | 005418 | UTL | US | 11/048,014 | ISSUED | 7,394,445 | 7/1/2008 |
| Digital Power Manager for Controlling and Monitoring an Array of Point-of-Load Regulators | 005446 | UTL | US | 11/932,796 | ISSUED | 7,646,382 | 1/12/2010 |
| Digital Pulse Width Modulation Controller with Preset Filter Coefficients | 005421 | UTL | US | 11/099,391 | ISSUED | 7,239,115 | 7/3/2007 |
| Digital Signal Processor Architecture Optimized for Controlling Switched Mode Power Supply | 005401 | UTL | US | 10/361,452 | ISSUED | 6,850,046 | 2/1/2005 |

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|---|---|---|---|---|---|---|---|
| Dual Input Range Power Supply Using Two Series or Parallel Connected Converter Sections with Automatic Power | 005387 | UTL | US | 09/740,110 | ISSUED | 6,370,047 | 4/9/2002 |
| Dual-Output DC-DC Power Supply | 005406 | UTL | US | 08/763,685 | ISSUED | 5,715,153 | 2/3/1998 |
| Dual-Output DC-DC Power Supply | 005407 | UTL | US | 09/504,568 | ISSUED | 6,195,275 | 2/27/2001 |
| Dynamic Control of Power Converter Output Voltage Slew Rate | 005405 | UTL | US | 10/670,050 | ISSUED | 6,914,348 | 7/5/2005 |
| Dynamic Control of Power Converter Output Voltage Slew Rate | 005427 | UTL | US | 11/174,811 | ISSUED | 6,989,612 | 1/24/2006 |
| Digital Output Voltage Regulation Circuit Having First Control Loop for High Speed and Second Control Loop for High Accuracy | 005420 | UTL | US | 11/084,766 | ISSUED | 7,141,956 | 11/28/2006 |
| Digital Control System and Method for Switched Mode Power Supply | 005399 | UTL | US | 10/361,667 | ISSUED | 6,933,709 | 8/23/2005 |
| Digital Double-Loop Output Voltage Regulation | 005435 | UTL | US | 11/605,045 | ISSUED | 7,394,236 | 7/1/2008 |
| Digital Double-Loop Output Voltage Regulation | 005436 | UTL | US | 11/671,889 | ISSUED | 7,554,310 | 6/30/2009 |
| Isolated Current Voltage, Voltage to Voltage Converter | 005449 | UTL | US | 12/115,452 | ISSUED | 7,834,613 | 11/16/2010 |
| Method and System for Controlling and Monitoring an Array of Point-of-Load Regulators | 005397 | UTL | US | 10/326,222 | ISSUED | 7,000,125 | 2/14/2006 |
| Method and System for Current Sharing Among a Plurality ofPower Modules | 005402 | UTL | US | 10/401,463 | ISSUED | 6,788,036 | 9/7/2004 |
| Method and System for Communicating Filter Compensation Coefficients for aDigital Power Control System | 005416 | UTL | US | 10/889,806 | ISSUED | 7,249,267 | 7/24/2007 |
| Method and System for Controlling an Array of Point-of-Load Regulators and Auxiliary Devices | 005433 | UTL | US | 11/354,550 | ISSUED | 7,266,709 | 9/4/2007 |
| Method and System for Controlling a Mixed Array of Point-of-Load Regulators Through a Bus Translator | 005434 | UTL | US | 11/558,848 | ISSUED | 7,673,157 | 3/2/2010 |
| Method and System for Controlling and Monitoring an Array of Point-of-Load Regulators | 005437 | UTL | US | 11/696,422 | ISSUED | 7,737,961 | 6/15/2010 |

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| Method and System for Controlling and Monitoring an Array of Point-of-Load Regulators | 005438 | UTL | US | 11/696,449 | ISSUED | 7,882,372 | 2/1/2011 |
| Method and System for Optimizing Filter Compensation Coefficients for a Digital Power Control System | 005439 | UTL | US | 11/781,878 | ISSUED | 7,743,266 | 6/22/2010 |
| Method and System for Communicaitng Filter Compensation Coefficients for a Digital Power Control System | 005440 | UTL | US | 11/778,647 | ISSUED | 7,565,559 | 7/21/2009 |
| Method and System for Controlling and Monitoring an Array of Point-of-Load Regulators | 005448 | UTL | US | 11/946,809 | ISSUED | 7,782,029 | 8/24/2010 |
| Micro Lead Frame Package | 005404 | UTL | US | 10/602,100 | ISSUED | 7,253,506 | 8/7/2007 |
| Multi-Deck Power Converter Module | 005408 | UTL | US | 08/803,980 | ISSUED | 5,812,387 | 9/22/1998 |
| System and Method for Controlling Output-Timing Parameters of Power Converters | 005423 | UTL | US | 11/103,835 | ISSUED | 7,068,021 | 6/27/2006 |
| Phase-Shifted Resonant Converter Having Reduced Output Ripple | 005394 | UTL | US | 10/407,047 | ISSUED | 6,970,366 | 11/29/2005 |
| Power Converter Having Regulated Dual Outputs | 005450 | UTL | US | 09/948,456 | ISSUED | 6,501,193 | 12/31/2002 |
| Power Supply Packaging System | 005395 | UTL | US | 10/377,202 | ISSUED | 7,129,577 | 10/31/2006 |
| Power Supply Packaging System | 005417 | UTL | US | 10/925,792 | ISSUED | 7,154,174 | 12/26/2006 |
| System and Method Providing Digital Pulse Width Modulation | 005396 | UTL | US | 10/299,439 | ISSUED | 6,833,691 | 12/21/2004 |
| System and Method for Managing Fault in a Power System | 005415 | UTL | US | 10/890,573 | ISSUED | 7,372,682 | 5/13/2008 |
| SYSTEM AND METHOD FOR PROVIDING DIGITAL PULSE WIDTH MODULATION | 005419 | UTL | US | 10/986,607 | ISSUED | 6,989,661 | 2/4/2006 |
| System and Method for Controlling a Point-of-Lod Regulator | 005425 | UTL | US | 11/117,188 | ISSUED | 7,459,892 | 12/2/2008 |
| System and Method for Providing Digital Pulse Width Modulation | 005428 | UTL | US | 11/187,182 | ISSUED | 7,057,379 | 6/6/2006 |
| System and Method for Controlling Output-Timing Parameters of Power Convertes | 005429 | UTL | US | 11/264,057 | ISSUED | 7,315,156 | 1/1/2008 |

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| System and Method for Providing Digital Pulse Width Modulation | 005431 | UTL | US | 11/326,813 | ISSUED | 7,202,651 | 4/10/2007 |
| System and Method for Interleaving Point-of-Load Regulators | 005442 | UTL | US | 11/927,682 | ISSUED | 7,493,504 | 2/17/2009 |
| System and Method for Managing Fault in a Power System | 005444 | UTL | US | 11/930,107 | ISSUED | 7,583,487 | 9/1/2009 |
| System and Method for Managing Fault in a Power System | 005445 | UTL | US | 11/930,065 | ISSUED | 7,554,778 | 6/30/2009 |
| System for Controlling an Monitoring an Array of Point-of-Load Regulators by a Host | 005426 | UTL | US | 11/165,798 | ISSUED | 7,456,617 | 11/25/2008 |
| System for Controlling an Array of Point-of-Load regulators and Auxiliary Devices | 005443 | UTL | US | 11/930,049 | ISSUED | 7,836,322 | 11/16/2010 |
| Self Tracking ADC for Digital Power Supply Control Systems | 005441 | UTL | US | 11/876,756 | ISSUED | 7,710,092 | 6/4/2010 |
| SINGLE-ENDED FORWARD CONVERTERS WITH QUASI-OPTIMAL RESETTING FOR SYNCHRONOUS RECTIFICATION | 005386 | UTL | US | 09/546,592 | ISSUED | 6,304,463 | 10/16/2001 |
| FORWARD CONVERTER CIRCUIT HAVING REDUCED SWITCHING LOSSES | 005384 | UTL | US | 09/706,407 | ISSUED | 6,370,051 | 4/9/2002 |
| SELF-DRIVEN SYNCHRONOUS RECTIFIER CIRCUIT FOR NON-OPTIMAL RESET SECONDARY VOLTAGE | 005385 | UTL | US | 09/765,799 | ISSUED | 6,301,139 | 10/9/2001 |
| Uregulated DC-DC Conerter Having Synchronous Rectification with Efficient Gate Drives | 005410 | UTL | US | 10/726,893 | ISSUED | 6,917,529 | 7/12/2005 |
| Voltage Set Point Control Scheme | 005430 | UTL | US | 11/281,973 | ISSUED | 7,526,660 | 4/28/2009 |
| Charging Voltage Control Circuit for Battery Chargers | N3799_001 | UTL | US | 634,093 | ISSUED | 5,254,932 | 10/19/1993 |
| Startup Circuit for Electronic Ballasts for Instant-Start Lamps | 0196_002 | UTL | US | 732,829 | ISSUED | 5,177,408 | 1/5/1993 |
| Charging Voltage Control and Current Limit For Battery Chargers | 0196_001 | UTL | US | 763,630 | ISSUED | 5,192,905 | 3/9/1993 |
| Equipment for the Generation of Stabilized High Direct Voltage, Particularly for Use in Combination with a Non-Polluting Muffler | 000851 | UTL | US | 07/898,841 | ISSUED | 5,289,360 | 2/22/1994 |

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| Control Circuit For A Direct Current Motor | N3799_038 | UTL | US | 08/807,899 | ISSUED | 5,828,194 | 10/27/1998 |
| Electronic Ballast For High-Density Discharge Lamps | 2598 | UTL | US | 08/838,440 | ISSUED | 5,923,128 | 7/13/1999 |
| Ultra-Flat Magnetic Device for Electronic Circuits | 2817 | UTL | US | 08/888,750 | ISSUED | 5,886,610 | 3/23/1999 |
| Electronic ballast circuit for independently increasing the power factor and decreasing the crest factor | N3799_002 | UTL | US | 08/892,875 | ISSUED | 5,939,837 | 8/17/1999 |
| A Power Supply for Discharge Lamps with Balanced Resonant Circuit | 3121 | UTL | US | 09/010,689 | ISSUED | 6,118,223 | 9/12/2000 |
| Supply Circuit for Discharge Lamps with Overvoltage Protection | 3281 | UTL | US | 09/064,300 | ISSUED | 6,194,842 | 2/27/2001 |
| Single Ended Forwrded DC-to-DC Conve5ter Providing Enhanced Resetting for Synchronous Rectification | 003394 | UTL | US | 09/105,511 | ISSUED | 5,886,881 | 3/23/1999 |
| Universal Power Supply for Discharge Lamps | 3426 | UTL | US | 09/109,138 | ISSUED | 6,081,077 | 6/27/2000 |
| Single Ended Forwarded DC-to-DC Conve5ter Providing Enhanced Resetting for Synchronous Rectification | 003395 | UTL | US | 09/266,199 | ISSUED | 5,986,899 | 11/16/1999 |
| Process for Producing Printed Circuits and Printed Circuits Thus Obtained | N4391 | UTL | US | 09/374,971 | ISSUED | 6,401,332 | 6/11/2002 |
| Single Ended Forwrded DC-to-DC Conve5ter Providing Enhanced Resetting for Synchronous Rectification | 003393 | UTL | US | 09/439,748 | ISSUED | 6,141,224 | 10/31/2000 |
| Circuit Module with Universal Connectivity | 003667 | UTL | US | 09/737,410 | ISSUED | 6,692,269 | 2/17/2004 |
| I-Channel Surface-Mount Connector | 003669 | UTL | US | 09/737,303 | ISSUED | 6,750,396 | 6/15/2004 |
| Fully Automatic Process for Magnetic Circuit Assembly | 003668 | UTL | US | 10/041,792 | ISSUED | 6,792,667 | 9/21/2004 |
| I-Channel Surface-Mount Connector with Extended Flanges | 003670 | UTL | US | 09/991,420 | ISSUED | 6,503,088 | 1/7/2003 |
| Power Supply Circuit of an Electric Motor and Corresponding Control Method | N8084 | UTL | US | 10/030,025 | ISSUED | 6,775,161 | 8/10/2004 |
| Process for Producing Printed Circuits and Printed Circuits thus Obtained | N8125 | UTL | US | 10/043,002 | ISSUED | 6,858,806 | 2/22/2005 |
| Isolated Drive Circuitry Used in Switch-Mode Power Converters | 003664 | UTL | US | 10/061,189 | ISSUED | 6,804,125 | 10/12/2004 |

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|---|---|---|---|---|---|---|---|
| Isolated Drive Circuitry Used in Switch-Mode Power Converters | 003675 | UTL | US | 10/061,662 | ISSUED | 7,102,898 | 9/5/2006 |
| Method and Apparatus for Providing an Initial Bias and Enable Signal for a Power Converter | 003678 | UTL | US | 10/085,363 | ISSUED | 6,724,624 | 4/20/2004 |
| Composite Low Flow Impedance Voltage Guard for Electronic Assemblies | 003662 | UTL | US | 10/134,214 | ISSUED | 6,560,105 | 5/6/2003 |
| I-Channel Surface-Mount Connector | 003671 | UTL | US | 10/138,139 | ISSUED | 6,860,003 | 3/1/2005 |
| I-Channel Surface-Mount Connector | 003672 | UTL | US | 10/138,173 | ISSUED | 6,722,930 | 4/20/2004 |
| Simple and Efficient Isolated Switching Regulator For Fast Transient Loads | 003679 | UTL | US | 10/187,645 | ISSUED | 6,567,279 | 5/20/2003 |
| Inductor Current Sensing in Isolated Switching Regulators and Related Methods | 003674 | UTL | US | 10/187,782 | ISSUED | 6,828,762 | 12/7/2004 |
| Method and Apparatus for Controlling Synchronous Rectifiers of a Power Converter | 003677 | UTL | US | 10/187,562 | ISSUED | 6,711,039 | 3/23/2004 |
| I-Channel Surface-Mount Connector | 003673 | UTL | US | 10/270,904 | ISSUED | 6,649,831 | 11/18/2003 |
| DC/DC Converter with Filter for Limiting the Oscillation of the Input Current and Associated Method" based on EPO 02425389.0 | N9486 | UTL | US | 10/463,831 | ISSUED | 6,946,822 | 9/20/2005 |
| Electric-Power Supply with Rectifier" based on EPO 02425390.8 | N9485 | UTL | US | 10/462,934 | ISSUED | 6,934,156 | 8/23/2005 |
| Current-Powered Converter with Energy Recovery Clamping Circuit" based on EPO app filed June 17, 2002 | N9483 | UTL | US | 10/463,210 | ISSUED | 6,836,413 | 12/28/2004 |
| Power Rectifier With Power Supply Cut-Off Means based on EPO 02425196.9 | N9254 | UTL | US | 10/402,690 | ISSUED | 7,061,733 | 6/13/2006 |
| Isolated Drive Circuitry Used in Switch-Mode Power Converters | 003676 | UTL | US | 10/648,659 | ISSUED | 6,791,851 | 9/14/2004 |
| Arrangement for Co-Planar Vertical Surface Mounting of Subassemblies on a Mother Board | 003660 | UTL | US | 10/716,134 | ISSUED | 6,815,615 | 11/9/2004 |
| Arrangement For Surface Mounting of Subassemblies on a Mother Board | 004336 | UTL | US | 10/715,907 | ISSUED | 7,027,305 | 4/11/2006 |
| Lighting Installation with Regulation of Light Emission Devices | N1311 | UTL | US | 10/824,770 | ISSUED | 7,135,966 | 11/14/2006 |

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| Vertifical Power JFET with Low On-Resistance for High Voltage Applications | 003386 | UTL | US | 10/828,773 | ISSUED | 7,235,827 | 6/26/2007 |
| Enhanced Connection Arrangement for Co-Planar Vertical Surface Mounting of Subassemblies on a Mother Board | 003680 | UTL | US | 10/972,488 | ISSUED | 7,145,085 | 12/5/2006 |
| Integral Molded Heat Sinks on DC-DC Converters and Power Supplies | 003390 | UTL | US | 11/044,870 | ISSUED | 7,236,368 | 6/26/2007 |
| Compensated Droop Method for Paralleling of Power Supplies (C-Droop Method) | 003389US | UTL | US | 11/049,909 | ISSUED | 7,304,462 | 12/4/2007 |
| Electronic Circuit Breaker | N8851 | UTL | US | 11/055,531 | ISSUED | 7,230,813 | 6/12/2007 |
| Method and System for Detecting Messages in the Presence of Noise | V0472 | | US | 11/911,358 | PUBLISHED | | |
| Anti-Islanding Method And Device For Distributed Power Generation Systems | N2518 | UTL | US | 11/197,128 | ISSUED | 7,408,268 | 8/5/2008 |
| AC COUPLED BIAS CIRCUIT FOR POWER CONVERTERS | 003399 | UTL | US | 11/198,601 | ISSUED | 7,274,575 | 9/25/2007 |
| Electronic Circuit Breaker | N8851CIP | UTL | US | 11/226,477 | ISSUED | 7,630,185 | 12/8/2009 |
| Method & Relative Protocol for the Transmission of Information Between a Collecting Unit & a Plurality of Control Devices & System Employing Said Method | N2667 | UTL | US | 10/551,592 | PENDING | | |
| Method and Device for the Control of a Three-Phase Inverter | N3035 | UTL | US | 11/349,620 | ISSUED | 7,760,526 | 7/20/2010 |
| Computer Implemented Systems and Methods for Pre-emptive Service and Improved Use of Service Resources | 004770 | UTL | US | 11/919,041 | ISSUED | 7,779,290 | 8/17/2010 |
| Delivery of Electric Power by Means of a Plurality of Parallel Inverters and Control Method Based on Maximum Power Point Tracking | 003166A | UTL | US | 12/663,499 | PUBLISHED | | |
| Method for Transmission of Information Between Nodes of a Network and Network Using Said Method | V0435_002 | UTL | US | 11/910,828 | PENDING | | |
| Electricity Distribution Network with Stray Voltage Monitoring and Method of Transmission of Information on Said Network | V0433 | UTL | US | 11/868,269 | PUBLISHED | | |

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| Improving Performance Metrics in Renewable Energy Systems | 004732 | UTL | US | 11/919,043 | PENDING | | |
| Computer Implemented Systems and Methods for Start-up, Calibration and Troubleshooting of an Installed Renewable Energy System | 004733 | UTL | US | 11/919,042 | PENDING | | |
| Computer Implemented Systems and Methods for Enhancing Renewable Energy Educational Activities | 004734 | UTL | US | 11/918,970 | PENDING | | |
| Computer Implemented Systems and Methods for Improving Renewable Energy Systems Performance Guarantees | 004771 | UTL | US | 11/919,016 | PENDING | | |
| A Method for Assigning Addresses to a Plurality of Electronic Devices Connected to a Communication Channel | 004162 | UTL | US | 12/812,835 | PUBLISHED | | |
| Method and Apparatus for Providing an Initial Bias and Enable Signal for a Power Converter | 003663 | UTL | US | 12/056,796 | PENDING | | |
| A System for Producing Electric Power from Renewable Sources and a Control Method Thereof | 000823 | UTL | US | 12/158,723 | PUBLISHED | | |
| Systems and Methods for Distributed Asset Management Having Tagging Capabilities | 004765 | UTL | US | 12/173,727 | PENDING | | |
| Circuit for Controlling Synchronous Rectifiers During the Start-Up into Prebiased Output Voltage | 001074 | PRV | US | 61/087,502 | PENDING | | |
| A HARDWARE VIRTUALIZATION SYSTEM | 005261 | UTL | US | 13/060,946 | PENDING | | |
| A Lighting Unit, A System Comprising IT and a Control Method Thereof | 001265 | UTL | US | 12/251,885 | PUBLISHED | | |
| Circuit for Controlling Synchronous Rectifiers During the Start-Up into Prebiased Output Voltage | 001400 | UTL | US | 12/500,741 | PENDING | | |
| State of the Art Power Supply Architecture | 002176 | PRV | US | 61/252,067 | PENDING | | |
| Connector Interface in a Modular Product | 002177 | PRV | US | 61/252,070 | PENDING | | |
| ZVS of Half Bridge Converter During Start-Up and Short Circuit Conditions | 002178 | PRV | US | 61/252,072 | PENDING | | |
| HID-Lamp Control Method and Circuit | 002820 | UTL | US | 12/623,211 | PUBLISHED | | |

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| AC/DC Power Converter with Active Rectification and Input Current Shaping<br><br>AC/DC Power Converter with Active Rectification and Input Current Shaping | 003069 | PRV | US | 61/299,388 | PENDING | | |
| AC/DC Power Converter with Active Rectification and Input Current Shaping<br><br>AC/DC Power Converter with Active Rectification and Input Current Shaping | 003069UTL | UTL | US | 12/707,775 | PENDING | | |
| Magnetic Component with Bobbinless Winding | 003453 | PRV | US | 61/312,556 | PENDING | | |
| Method and Apparatus for Reprogramming applications in embedded devices | 003699 | UTL | US | 12/754,380 | PUBLISHED | | |
| Method for Determining the Phases in a Multi-Phase Electrical System and Device for the Implementation Thereof | 003864 | UTL | US | 12/740,650 | PUBLISHED | | |
| Isolation System for a Bi-directional Communication Bus Line | 002175 | PRV | US | 61/329,889 | PENDING | | |
| MAGNETIC COMPONENT WITH BOBBINLESS WINDING | 003606 | UTL | US | 12/780,498 | PENDING | | |
| SINGLE STAGE MICRO-INVERTER WITH H-BRIDGE TOPOLOGY COMBINING FLYBACK AND FORWARD OPERATING MODES | 002314 | UTL | US | 12/817,726 | PENDING | | |
| Power Supply Architecture for Controlling and Monitoring Isolated Output Modules | 003096 | UTL | US | 12/905,693 | PENDING | | |
| System and Method for Zero-Volt Switching of Half Bridge Converters During Start-Up and Short Circuit Conditions | 003097 | UTL | US | 12/905,699 | PENDING | | |
| Modular Power Supply Interconnection System With Pluggable Interface | 003098 | UTL | US | 12/905,707 | PENDING | | |
| MultiLevel Topology For a High Power Switching Converter | 003621 | PRV | US | 61/410,032 | PENDING | | |
| Isolation System for a Bi-directional Communication Bus Line | 004787 | UTL | US | 12/957,162 | PENDING | | |

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| Antivibration Fan Control for Modular Power Supplies Used in Vibration Sensitive Applications | 004843 | UTL | US | 61/421,402 | PENDING | | |
| Input Current Shaping Method for Transition and Discontinues Mode Power Converter | 005207 | PRV | US | 61/441,486 | PENDING | | |
| Digital Phase Adjustment Method for Multi-Phase Power Converters | 005208 | PRV | US | 61/441,490 | PENDING | | |
| System and Method for Cntrolling Out-TimingParameters of Power Converters | 005391 | UTL | US | 6,936,999 | ISSUED | | |
| System and Method for Interleaving Point-of-Load Regulators | 005392 | UTL | US | 7,373,527 | ISSUED | | |
| Voltage Set Point Control Scheme | 005390 | UTL | US | 7,080,265 | ISSUED | | |
| Forward Converter Circuit Having Reduced Switching Losses | 005389 | UTL | US | 7,049,798 | ISSUED | | |
| Multi-Phase Resonant Converter with Trimmable Inductor and Phase Current Balancing Method | 004842 | UTL | US | 61/448,856 | PENDING | | |
| Apparatus and Method of Optimizing Power System Efficiency Using a Power Loss Model (OMM File) | | UTL | US | 12/127,726 | PENDING | | |
| Method and System for Controlling an Array of Point-of-Load Regulators and Auxiliary Devices (OMM File) | | UTL | US | 11/760,660 | PENDING | | |
| Inverter for the Supply Discharge Lamps with Heated Electrodes, withResonant Circuit | | UTL | US | 187,878 | ISSUED | 5,479,334 | 12/26/1995 |
| Electronic Reactor for the Supply of Discharge Lams with an Oscillator Circuit to Limit the Crest Factor and to Correct the Power Factor | | UTL | US | 386,810 | ISSUED | 5,485,060 | 1/16/1996 |
| Flat Pin Connetor for Electronic Circuit Boards | | UTL | US | 912,292 | ISSUED | 5,848,903 | 12/15/1998 |
| Power Supply Module | | UTL | US | 10/060,621 | ISSUED | 6,704,203 | 3/9/2004 |
| Method and Apparatus for Providing an Initial Bias and Enable Signal for a Power Converter | | UTL | US | 10/085,363 | ISSUED | 6,724,642 | 4/20/2004 |
| Transistor Driver Circuit | | UTL | US | 10/357,313 | ISSUED | 6,741,099 | 5/25/2004 |

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| Arrangement for Co-Planar Vertical Surface Mounting of Subassemblies on a Mother Board | | UTL | US | 10/716,134 | ISSUED | 6,815,614 | 11/9/2004 |
| Apparatus and Method for Testing HighCurrent Circuit Assemblies | | UTL | US | 10/053,135 | ISSUED | 6,838,898 | 1/4/2005 |
| System and Method for Controlling a Point-of-Load Regulator | | UTL | US | 10/293,531 | ISSUED | 6,949,916 | 9/27/2005 |
| Connector for Surface Mounting Subassemblies Vertically on a Mother Board and Asemblies Comprising the Same | | UTL | US | 10/715,908 | ISSUED | 6,984,156 | 1/10/2006 |
| Primary Side Turn-Off of Self-Driven Synchronous Rectifiers | | UTL | US | 10/843,406 | ISSUED | 7,203,041 | 4/10/2007 |
| Self Driven Synchronous Rectifier Shutdown Circuit and Method | | UTL | US | 11/614,908 | ISSUED | 7,333,350 | 2/19/2008 |
| Power Supply Mounting Insert | | Design | US | 241/835 | ISSUED | D324,487 | 3/10/1992 |
| Power Converter Casing | | Design | US | 29/168,512 | ISSUED | D349,682 | 8/161994 |
| Power Converter Casing | | Design | US | 29/311,854 | ISSUED | D350,529 | 9/13/1994 |
| Power Converter Casing | | Design | US | 29/267,125 | ISSUED | D351,134 | 10/4/1994 |
| AC-DC Converter | | Design | US | 29/214,388 | ISSUED | D409,138 | 5/4/1999 |
| Power Supply Housing | | Design | US | 29/345,293 | ISSUED | D429,213 | 8/8/2000 |
| Power Supply Housing | | Design | US | 29/266,384 | ISSUED | D494,538 | 8/17/2004 |

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| Voltage Converter | | UTL | US | 10/082,625 | ISSUED | 6,657,872 | 12/2/2003 |
| Apparatus for producing and testing electronic units | | UTL | US | 10/106,887 | ISSUED | 6,707,288 | 3/16/2004 |
| Multi-Output synchronous flyback converter | | UTL | US | 12/451,682 | Published | | |