

PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT																						
NATURE OF CONVEYANCE:	SECURITY AGREEMENT																						
CONVEYING PARTY DATA																							
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Intersil Corporation</td><td>04/27/2010</td></tr><tr><td>Techwell, Inc.</td><td>04/27/2010</td></tr><tr><td>Intersil Communications, Inc.</td><td>04/27/2010</td></tr><tr><td>Quellan, Inc.</td><td>04/27/2010</td></tr><tr><td>Zilker Labs, Inc.</td><td>04/27/2010</td></tr><tr><td>Kenet, Inc.</td><td>04/27/2010</td></tr><tr><td>Intersil Americas Inc.</td><td>04/27/2010</td></tr><tr><td>Elantec Semiconductor, Inc.</td><td>04/27/2010</td></tr><tr><td>D2Audio Corporation</td><td>04/27/2010</td></tr><tr><td>Planet Ate, Inc.</td><td>04/27/2010</td></tr></tbody></table>		Name	Execution Date	Intersil Corporation	04/27/2010	Techwell, Inc.	04/27/2010	Intersil Communications, Inc.	04/27/2010	Quellan, Inc.	04/27/2010	Zilker Labs, Inc.	04/27/2010	Kenet, Inc.	04/27/2010	Intersil Americas Inc.	04/27/2010	Elantec Semiconductor, Inc.	04/27/2010	D2Audio Corporation	04/27/2010	Planet Ate, Inc.	04/27/2010
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Planet Ate, Inc.	04/27/2010																						
RECEIVING PARTY DATA																							
<table border="1"><tr><td>Name:</td><td>Morgan Stanley & Co. Incorporated</td></tr><tr><td>Street Address:</td><td>One Pierrepont Plaza, 7th Floor</td></tr><tr><td>Internal Address:</td><td>300 Cadman Plaza West</td></tr><tr><td>City:</td><td>Brooklyn</td></tr><tr><td>State/Country:</td><td>NEW YORK</td></tr><tr><td>Postal Code:</td><td>11201</td></tr></table>		Name:	Morgan Stanley & Co. Incorporated	Street Address:	One Pierrepont Plaza, 7th Floor	Internal Address:	300 Cadman Plaza West	City:	Brooklyn	State/Country:	NEW YORK	Postal Code:	11201										
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PROPERTY NUMBERS Total: 184																							
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>12378818</td></tr><tr><td>Application Number:</td><td>12006703</td></tr><tr><td>Application Number:</td><td>12506672</td></tr><tr><td>Application Number:</td><td>12558035</td></tr><tr><td>Application Number:</td><td>12350560</td></tr><tr><td>Application Number:</td><td>12366642</td></tr><tr><td> </td><td> </td></tr></tbody></table>		Property Type	Number	Application Number:	12378818	Application Number:	12006703	Application Number:	12506672	Application Number:	12558035	Application Number:	12350560	Application Number:	12366642								
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PATENT
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Application Number:	12547882

Application Number:	12270692
Application Number:	12346211
Application Number:	12366159

CORRESPONDENCE DATA

Fax Number: (650)813-4848

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 6508134800

Email: elaine.carrera@dechert.com

Correspondent Name: Joshua H. Rawson

Address Line 1: Dechert LLP

Address Line 2: 1095 Avenue of the Americas

Address Line 4: New York, NEW YORK 10036

NAME OF SUBMITTER:	Joshua H. Rawson
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Total Attachments: 116

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PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT, dated as of April 27, 2010 (“Patent Security Agreement”), made by each of the signatories hereto (together with any other entity that may become a party hereto as provided herein, the “Grantors”), is in favor of MORGAN STANLEY & CO. INCORPORATED, as collateral agent (in such capacity, the “Collateral Agent”) for the Lenders (in such capacity, the “Assignee”).

W I T N E S S E T H:

WHEREAS, the Grantors are party to a Guarantee and Collateral Agreement dated as of April 27, 2010 (the “Guarantee and Collateral Agreement”) in favor of the Assignee pursuant to which the Grantors are required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Agents and the Lenders to enter into the Credit Agreement and to induce Lenders to make their respective extensions of credit to the Borrower thereunder and to induce the Qualified Counterparties to enter into the Specified Hedge Agreements and provide financial accommodation, each Grantor hereby agrees with the Collateral Agent, for the benefit of the Secured Parties, as follows:

SECTION 1. Defined Terms. Capitalized terms used but not otherwise defined herein shall have the meanings given to them in the Guarantee and Collateral Agreement. For purposes of this Patent Security Agreement, the term “Patents” shall mean, collectively, patents, patent applications, certificates of inventions, industrial designs (whether established or registered or recorded in the United States or any other country or any political subdivision thereof), including, without limitation, each issued patent and patent application identified on Schedule 1 hereto, together with any and all (i) inventions and improvements described and claimed therein, (ii) reissues, divisions, continuations, renewals, extensions and continuations-in-part thereof and amendments thereto, (iii) income, fees, royalties, damages, claims and payments now or hereafter due and/or payable thereunder and with respect thereto, including, without limitation, damages, claims and payments for past, present and future infringements, dilutions, misappropriations, or other violations thereof, (iv) rights to sue or otherwise recover for past, present and future infringements, misappropriations, dilutions or other violations thereof and (v) rights corresponding thereto throughout the world.

SECTION 2. Grant of Security Interest in Patent Collateral. Each Grantor hereby grants to the Collateral Agent, for the benefit of the Secured Parties, a security interest in all of the following property now owned or at any time hereafter acquired by such Grantor or in which such Grantor now has or at any time in the future may acquire any right, title or interest (collectively, the “Patent Collateral”), as collateral security for the prompt and complete payment and performance when due (whether at the stated maturity, by acceleration or otherwise) of all Obligations:

(a) all Patents of such Grantor, including, without limitation, the registered and applied-for Patents of such Grantor listed on Schedule 1 attached hereto; and

(b) to the extent not covered by clause (a), all Proceeds of any of the foregoing;

provided, that (i) this Agreement shall not constitute a grant of a security interest in any property to the extent that and for as long as such grant of a security interest (A) is prohibited by any Requirement of Law, (B) requires a filing with or consent from any Governmental Authority pursuant to any Requirement of Law that has not been made or obtained, (C) constitutes a breach or default under or results in the termination of, or requires any consent not obtained under, any contract, property rights, lease, license or agreement, instrument or other document except to the extent that such Requirement of Law or provisions of any such contract, property rights, lease, license or agreement, instrument or other document is ineffective under applicable law or would be ineffective under Sections 9-406, 9-407, 9-408 or 9-409 of the New York UCC to prevent the attachment of the security interest granted hereunder, (D) is in any United States Trademark applications filed on the basis of a Grantor's intent-to-use such mark, in each case, unless and until evidence of the use of such Trademark in interstate commerce is submitted to the PTO, but only if and to the extent that the granting of a security interest in such application would result in the invalidation of such application, provided, that to the extent such application is excluded from the Collateral, upon the submission of evidence of use of such Trademark to the PTO, such Trademark application shall automatically be included in the Collateral, without further action on any party's part, (E) is in Capital Stock which is specifically excluded from the definition of Pledged Stock by virtue of the provisos to such definition, (F) is in motor vehicles or other assets in which a security interest may be perfected only through compliance with a certificate of title or similar statute, (G) is in any Margin Stock owned by the Borrower or MergerSub, (H) is in any Collateral owned by Techwell, Inc. or its Subsidiaries until such time as Techwell, Inc. is a wholly-owned Subsidiary of Borrower and (I) is in any Intercompany Note issued by Intersil Europe S  rl to Intersil Communications, Inc. in connection with the Permitted Reorganization; and (ii) the security interest granted hereby (A) shall attach at all times to all proceeds of such property, (B) shall attach to such property immediately and automatically (without need for any further grant or act) at such time as the condition described in clause (i) ceases to exist and (C) to the extent severable shall in any event attach to all rights in respect of such property that are not subject to the applicable condition described in clause (i).

SECTION 3. Guarantee and Collateral Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with security interest granted to the Assignee pursuant to the Guarantee and Collateral Agreement and Grantors hereby acknowledge and affirm that the rights and remedies of the Assignee with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Guarantee and Collateral Agreement. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Guarantee and Collateral Agreement, the provisions of the Guarantee and Collateral Agreement shall govern.

SECTION 4. Recordation. Each Grantor hereby authorizes and requests that the Commissioner of Patents and Trademarks record this Patent Security Agreement.

SECTION 5. Termination. (a) At such time as the Loans, the Reimbursement Obligations and all other Obligations (other than Unasserted Contingent Obligations and obligations (other than Unasserted Contingent Obligations) under or in respect of Hedge Agreements) have been paid in full (including, with respect to any Letters of Credit, either the deposit of cash collateral in an amount equal to 105% of the outstanding L/C Obligations or the delivery of a "backstop" Letter of Credit reasonably satisfactory to the Issuing Lender in its sole discretion), all commitments to extend credit under the Loan Documents have terminated, the Collateral shall be released from the Liens created hereby, and this Agreement and all obligations (other than those expressly stated to survive such termination) of the Collateral Agent and each Grantor hereunder shall terminate, all without delivery of any instrument or performance of any act by any party, and all rights to the Collateral shall revert to the Grantors. At the request and sole expense of any Grantor following any such termination, the Collateral Agent shall deliver to such Grantor any Collateral held by the Collateral Agent hereunder and execute and deliver to such Grantor such documents (in form and substance reasonably satisfactory to the Collateral Agent) as such Grantor may reasonably request to evidence such termination.

(b) If any of the Collateral is sold, transferred or otherwise disposed of by any Grantor in a transaction permitted by the Credit Agreement, then the Lien created pursuant to this Agreement in such Collateral shall be released, and the Collateral Agent, at the request and sole expense of such Grantor, shall execute and deliver to such Grantor all releases or other documents reasonably necessary or desirable for the release of such Collateral (not including Proceeds thereof) from the security interests created hereby. At the request and sole expense of the Borrower, a Subsidiary Guarantor shall be released from its obligations hereunder in the event that all the Capital Stock of such Subsidiary Guarantor shall be sold, transferred or otherwise disposed of in a transaction permitted by the Credit Agreement; provided that the Borrower shall have delivered to the Collateral Agent, at least ten Business Days prior to the date of the proposed release, a written request for release identifying the relevant Subsidiary Guarantor and the terms of the sale or other disposition in reasonable detail, including the price thereof and any expenses in connection therewith, together with a certification by the Borrower stating that such transaction is in compliance with the Credit Agreement and the other Loan Documents.

SECTION 6. GOVERNING LAW. THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES UNDER THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

SECTION 7. Counterparts. This Agreement may be executed by one or more of the parties to this Agreement on any number of separate counterparts, and all of said counterparts taken together shall be deemed to constitute one and the same instrument. Delivery of an executed signature page of this Agreement by facsimile transmission or electronic transmission (in PDF format) shall be effective as delivery of a manually executed counterpart hereof. A set of the copies of this Agreement signed by all the parties shall be lodged with the Borrower, the Administrative Agent and the Collateral Agent.

IN WITNESS WHEREOF, each Grantor has caused this PATENT SECURITY AGREEMENT to be executed and delivered by its duly authorized officer as of the date first above written.

INTERSIL CORPORATION

By: Douglas A. Balog
Name: Douglas A. Balog
Title: Assistant Secretary

TECHWELL, INC.

By: Douglas A. Balog
Name: Douglas A. Balog
Title: Assistant Secretary

INTERSIL COMMUNICATIONS, INC.

By: Douglas A. Balog
Name: Douglas A. Balog
Title: Assistant Secretary

QUELLAN, INC.

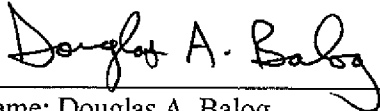
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Name: Douglas A. Balog
Title: Assistant Secretary

ZILKER LABS, INC.

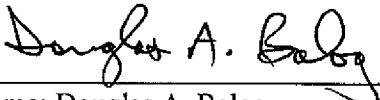
By: Douglas A. Balog
Name: Douglas A. Balog
Title: Assistant Secretary

[Signature Page to Patent Security Agreement]

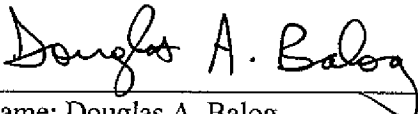
KENET, INC.

By: 
Name: Douglas A. Balog
Title: Assistant Secretary

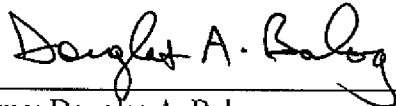
INTERSIL AMERICAS INC.

By: 
Name: Douglas A. Balog
Title: Assistant Secretary

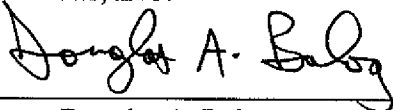
ELANTEC SEMICONDUCTOR, INC.

By: 
Name: Douglas A. Balog
Title: Assistant Secretary

D2AUDIO CORPORATION

By: 
Name: Douglas A. Balog
Title: Assistant Secretary

PLANET ATE, INC.

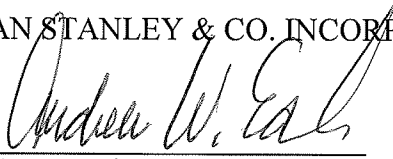
By: 
Name: Douglas A. Balog
Title: Assistant Secretary

[Signature Page to Patent Security Agreement]

Accepted and Agreed:

MORGAN STANLEY & CO. INCORPORATED, AS ASSIGNEE

By:


Name: ANDREW EALES
Title: AUTHORIZED SIGNATORY

[Signature Page to Patent Security Agreement]

PATENT
REEL: 024335 FRAME: 0479

PATENTS

Patent Registrations and Applications

Intersil Corporation – U.S. Registered Patents and Pending Applications

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
APPARATUS AND METHOD FOR MINIMIZING SPURIOUS HARMONIC NOISE IN SWITCHED CURRENT STEERING ARCHITECTURES	United States	6794924	21-Sep-2004	Granted
PRECISION LOOP VOLTAGE DETECTOR FOR SUBSCRIBER LINE INTERFACE CIRCUIT APPLICATIONS	United States	6469519	22-Oct-2002	Granted
PACKAGE FOR INTEGRATED CIRCUIT WITH THERMAL VIAS AND METHOD THEREOF	United States	6809416	26-Oct-2004	Granted
PACKAGE FOR INTEGRATED CIRCUIT WITH THERMAL VIAS AND METHOD THEREOF	United States	6861283	01-Mar-2005	Granted
TRANSMITTER WITH LIMITED SPECTRAL REGROWTH AND METHOD THEREFOR	United States	7113551	26-Sep-2006	Granted
MULTIPHASE CONVERTER WITH ZERO VOLTAGE SWITCHING	United States	7138789	21-Nov-2006	Granted

Intersil Corporation – Foreign Registered Patents and Patent Applications

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
PROCESS FOR DOPING TWO LEVELS OF A DOUBLE POLY BIPOLAR TRANSISTOR AFTER FORMATION OF SECOND POLY LAYER	JP	4174579	29-Aug-2008	Granted
RE-SAMPLING CIRCUIT AND ASSOCIATED METHOD	CN	98104209.0	24-Sep-2003	Granted
RE-SAMPLING CIRCUIT AND ASSOCIATED METHOD	JP	3982594	13-Jul-2007	Granted
RE-SAMPLING CIRCUIT AND ASSOCIATED METHOD	KR	484710	13-Apr-2005	Granted
RE-SAMPLING CIRCUIT AND ASSOCIATED METHOD	TW	NI-120117	11-Sep-2000	Granted
DC-DC CONVERTER HAVING DYNAMIC	KR	545867	18-Jan-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
REGULATOR WITH CURRENT SOURCING AND SINKING MEANS			2006	
DC-DC CONVERTER HAVING DYNAMIC REGULATOR WITH CURRENT SOURCING AND SINKING MEANS	TW	NI-124761	11-Jan- 2001	Granted
DC-DC CONVERTER HAVING DYNAMIC REGULATOR WITH CURRENT SOURCING AND SINKING MEANS	JP	4077556	16-Apr- 2008	Granted
DC-DC CONVERTER HAVING DYNAMIC REGULATOR WITH CURRENT SOURCING AND SINKING MEANS	CN	98115283.X	30-Jul-2003	Granted
DC-DC CONVERTER HAVING DYNAMIC REGULATOR WITH CURRENT SOURCING AND SINKING MEANS	DE	EP0893876	09-Apr- 2003	Granted
LOOP IMPEDANCE MEASURING APPARATUS AND METHOD FOR SUBSCRIBER LOOP INTERFACE CIRCUITS	DE	60020461.8	01-Jun- 2005	Granted
LOOP IMPEDANCE MEASURING APPARATUS AND METHOD FOR SUBSCRIBER LOOP INTERFACE CIRCUITS	EP	1079591	01-Jun- 2005	Granted
BATTERY SWITCHING SUBSCRIBER LOOP INTERFACE CIRCUIT	EP	0957626	09-Aug- 2006	Granted
BATTERY SWITCHING SUBSCRIBER LOOP INTERFACE CIRCUIT	DE	0957626	09-Aug- 2006	Granted
DIGITAL-TO-ANALOG CONVERTER INCLUDING CURRENT CELL MATRIX WITH ENHANCED LINEARITY AND ASSOCIATED METHODS	DE	0898374	03-Jan- 2007	Granted
DIGITAL-TO-ANALOG CONVERTER INCLUDING CURRENT CELL MATRIX WITH ENHANCED LINEARITY AND ASSOCIATED METHODS	FR	0898374	03-Jan- 2007	Granted
DIGITAL-TO-ANALOG CONVERTER INCLUDING CURRENT CELL MATRIX WITH ENHANCED LINEARITY AND ASSOCIATED METHODS	GB	0898374	03-Jan- 2007	Granted
DC-TO-DC CONVERTER WITH INDUCTOR CURRENT SENSING AND RELATED METHODS	TW	NI-152003	03-Mar- 2003	Granted
DC-TO-DC CONVERTER WITH INDUCTOR CURRENT SENSING AND RELATED METHODS	JP	3254199	22-Nov- 2001	Granted
PARASITIC CURRENT BARRIERS	FR	0982775	19-Jan- 2005	Granted
PARASITIC CURRENT BARRIERS	DE	0982775	19-Jan- 2005	Granted
PARASITIC CURRENT BARRIERS	GB	0982775	19-Jan- 2005	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
PARASITIC CURRENT BARRIERS	IT	0982775	19-Jan-2005	Granted
ACCESSING MAIN ATX OUTPUTS WITHOUT MONITORING ALL OUTPUTS	CN	00106914.4	29-Jul-2005	Granted
ACCESSING MAIN ATX OUTPUTS WITHOUT MONITORING ALL OUTPUTS	TW	NI-153806	06-Aug-2002	Granted
EDGE TERMINATION FOR SILICON POWER DEVICES	FR	1065727	24-May-2006	Granted
EDGE TERMINATION FOR SILICON POWER DEVICES	IT	1065727	24-May-2006	Granted
EDGE TERMINATION FOR SILICON POWER DEVICES	DE	1065727	24-May-2006	Granted
EDGE TERMINATION FOR SILICON POWER DEVICES	EP	1065727	24-May-2006	Granted
EDGE TERMINATION FOR SILICON POWER DEVICES	KR	10-619621	28-Aug-2006	Granted
CURRENT MODE DC/DC CONVERTER WITH CONTROLLED OUTPUT IMPEDANCE	CN	ZL00126459	07-Sep-2005	Granted
CURRENT MODE DC/DC CONVERTER WITH CONTROLLED OUTPUT IMPEDANCE	TW	NI-158315	01-Jul-2002	Granted
CURRENT MODE DC/DC CONVERTER WITH CONTROLLED OUTPUT IMPEDANCE	KR	10-0596555	27-Jun-2006	Granted
SYNCHRONOUS-RECTIFIED DC TO DC CONVERTER WITH IMPROVED CURRENT SENSING AND ASSOCIATED METHODS	KR	10-0573520	18-Apr-2006	Granted
SYNCHRONOUS-RECTIFIED DC TO DC CONVERTER WITH IMPROVED CURRENT SENSING AND ASSOCIATED METHODS	CN	ZL00126460	11-May-2005	Granted
SYNCHRONOUS-RECTIFIED DC TO DC CONVERTER WITH IMPROVED CURRENT SENSING AND ASSOCIATED METHODS	TW	173702	11-Jan-2003	Granted
MULTI-PHASE CONVERTER WITH BALANCED CURRENTS	KR	550401	02-Feb-2006	Granted
MULTI-PHASE CONVERTER WITH BALANCED CURRENTS	CN	ZL00126094	13-Apr-2005	Granted
BACKWARDS DRIVABLE MOS OUTPUT DRIVER	KR	10-0643041	31-Oct-2006	Granted
BACKWARDS DRIVABLE MOS OUTPUT DRIVER	TW	NI-154980	11-May-2002	Granted
METHODS TO CONTROL THE DROOP WHEN POWERING DUAL MODE PROCESSORS AND ASSOCIATED CIRCUITS	TW	NI-171825	10-Jun-2003	Granted
OSCILLATOR HAVING REDUCED SENSITIVITY TO SUPPLY VOLTAGE CHANGES	TW	NI-163253	11-Sep-2002	Granted
CASCADABLE, HIGH EFFICIENCY CHARGE PUMP CIRCUIT AND RELATED METHODS	TW	NI-221697	01-Oct-2004	Granted
DC TO DC CONVERTER METHOD AND	TW	NI-177896	21-May-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
CIRCUITRY			2003	
DC TO DC CONVERTER METHOD AND CIRCUITRY	CN	ZL01810047	16-Jul-2008	Granted
INTEGRATED CIRCUIT WITH CURRENT-LIMITED POWER OUTPUT AND ASSOCIATED METHOD	TW	NI-173429	11-Mar-2003	Granted
INTEGRATED CIRCUIT WITH CURRENT SENSE CIRCUIT AND ASSOCIATED METHODS	TW	I238927	01-Sep-2005	Granted
SYNTHETIC RIPPLE REGULATOR	CN	CN100454738	21-Jan-2009	Granted
SYNTHETIC RIPPLE REGULATOR	JP	3981083	06-Jul-2007	Granted
SYNTHETIC RIPPLE REGULATOR	FR	1472777	08-Mar-2006	Granted
SYNTHETIC RIPPLE REGULATOR	TW	I248249	21-Jan-2006	Granted
SYNTHETIC RIPPLE REGULATOR	TW	NI-197364	16-Jun-2004	Granted
SYNTHETIC RIPPLE REGULATOR	KR	10-614841	16-Aug-2006	Granted
SYNTHETIC RIPPLE REGULATOR	IT	1472777	08-Mar-2006	Granted
MATCHED IMPEDANCE BONDING TECHNIQUE IN HIGH-SPEED INTEGRATED CIRCUITS	TW	I251889	21-Mar-2006	Granted
PHASED-LOCKED LOOP WITH ANALOG PHASE ROTATOR	DE	P60216475.3	29-Nov-2006	Granted
PACKAGE FOR INTEGRATED CIRCUIT WITH THERMAL VIAS AND METHOD THEREOF	TW	I226687	11-Jan-2005	Granted
WAFER BONDING USING TRAPPED OXIDIZING VAPOR	DE	69114531.8	15-Nov-1995	Granted
WAFER BONDING USING TRAPPED OXIDIZING VAPOR	JP	2992843	22-Oct-1999	Granted
WAFER BONDING USING TRAPPED OXIDIZING VAPOR	GB	0441270	15-Nov-1995	Granted
WAFER BONDING USING TRAPPED OXIDIZING VAPOR	FR	0441270	15-Nov-1995	Granted
LOW OFFSET UNITY GAIN BUFFER AMPLIFIER	JP	3235084	28-Sep-2001	Granted
HIGH FREQUENCY ANALOG TRANSISTORS, METHOD OF FABRICATION AND CIRCUIT IMPLEMENTATION	KR	292851	27-Mar-2001	Granted
HIGH FREQUENCY ANALOG TRANSISTORS, METHOD OF FABRICATION AND CIRCUIT IMPLEMENTATION	JP	3798808	28-Apr-2006	Granted
STACKED CONFIGURATION FOR INTEGRATED CIRCUITS DEVICES	IT	0555407	15-May-1996	Granted
STACKED CONFIGURATION FOR	GB	0555407	15-May-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
INTEGRATED CIRCUITS DEVICES			1996	
STACKED CONFIGURATION FOR INTEGRATED CIRCUITS DEVICES	FR	0555407	15-May- 1996	Granted
STACKED CONFIGURATION FOR INTEGRATED CIRCUITS DEVICES	DE	0555407	15-May- 1996	Granted
STACKED CONFIGURATION FOR INTEGRATED CIRCUITS DEVICES	EP	0555407	15-May- 1996	Granted
TELEPHONE SUBSCRIBER LINE CIRCUIT, COMPONENTS AND METHODS	DE	69303163.8	12-Jun- 1996	Granted
BACKWARDS DRIVABLE MOS OUTPUT DRIVER	JP	2000/348984	16-Nov- 2000	Published
DC TO DC CONVERTER METHOD AND CIRCUITRY	CN	10098553	02-May- 2001	Pending
DC TO DC CONVERTER METHOD AND CIRCUITRY	DE	10196149.9	02-May- 2001	Pending
INTEGRATED CIRCUIT WITH A MOS STRUCTURE HAVING REDUCED PARASITIC BIPOlar TRANSISTOR ACTION	WO	US02/32121	08-Oct- 2002	Pending
INTEGRATED CIRCUIT WITH A MOS STRUCTURE HAVING REDUCED PARASITIC BIPOlar TRANSISTOR ACTION	JP	2003-537124	12-Apr- 2004	Pending
INTEGRATED CIRCUIT WITH A MOS STRUCTURE HAVING REDUCED PARASITIC BIPOlar TRANSISTOR ACTION	EP	02778470.1	14-Apr- 2004	Pending
N-WAY CIRCULAR PHASE INTERPOLATOR FOR GENERATING A SIGNAL HAVING ARBITRARY PHASE	EP	01302646.3	22-Mar- 2001	Pending
HIGH FREQUENCY ANALOG TRANSISTORS, METHOD OF FABRICATION AND CIRCUIT IMPLEMENTATION	JP	2006-49228	24-Feb- 2006	Pending
DIGITAL COMPONENT TESTING APPARATUS AND METHOD	KR	1994-702977	19-Feb- 1993	Pending
DIGITAL COMPONENT TESTING APPARATUS AND METHOD	JP	5514997	19-Feb- 1993	Pending

Techwell, Inc.

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date	Status
Timing Error Detector for Vestigial Side Band	United States	US 7474990	09/29/2006	Granted
Carrier Phase Independent Symbol Timing Recovery Methods for VSB Receivers	United States	12/349,454	01/06/2009	Pending
Reducing Equalizer Error Propagation with a Low Complexity Soft Output Viterbi Decoder	United States	US 7697642	4/13/2010	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date	Status
Dual PDFE System with Forward-Backward Viterbi	United States	US 7697604	04/17/2006	Granted
Dual PDFE System with Forward-Backward Viterbi	<u>WIPO</u>	<u>PCT/US200</u> <u>7/009211</u>		Pending
Mixed format media transmission systems and methods	United States	12/363,669	01/30/2009	Pending
Analog equalizer systems and methods for baseband video signals	United States	12/698,061	02/01/2010	Pending
Constellation detection in a multi-mode QAM communications system	United States	12/698,066	02/01/2010	Pending
Carrier phase offset correction for a QAM system	United States	12/698,071	02/01/2010	Pending
Novel frame structure for a QAM system	United States	12/698,037	02/01/2010	Pending
SLOC spot monitoring	United States	12/698,041	02/01/2010	Pending
Mixed format media transmission systems and methods	WIPO	PCT/US10/ 22772	02/01/2010	Pending
Reducing equalizer error propagation with a low complexity soft output viterbi decoder	South Korea	10-2008- 7025508	04/13/2007	Pending
Dual PDFE system with forward-backward viterbi	South Korea	10-2008- 7025509	04/13/2007	Pending
<u>Mixed format media transmission systems and methods</u>	Taiwan	99102857	02/01/2010	Pending
SLOC Analog Equalizer for Baseband Video Signal	United States	61/187,970	06/17/2009	Pending
A Method for Constellation Detection in a Multi-Mode QAM Communications System	United States	61/187,977	06/17/2009	Pending
Novel Carrier Phase Offset Correction for a QAM System	United States	61/187,980	06/17/2009	Pending
Novel Frame Structure for a QAM System	United States	61/187,986	06/17/2009	Pending
SLOC Spot Monitoring	United States	61/187,996	06/17/2009	Pending
Display image enhancement apparatus and method using adaptive interpolation with correlation	Taiwan	TW 94101662		Granted
<u>Method for Determining the Step Size for an LMS Adaptive Equalizer for 8VSB</u>	United States	11/687,909	03/19/2007	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date	Status
<u>Method for Determining the Step Size for an LMS Adaptive Equalizer for 8VSB</u>	United States	US 7616685	07/11/2007	Granted
<u>Image processing device and camera system</u>	Japan	JP 4418029		

Quellan Inc. – U.S. Registered Patents and Patent Applications

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
HIGH-SPEED ANALOG-TO-DIGITAL CONVERTER USING A UNIQUE GRAY CODE HAVING MINIMAL BIT TRANSITIONS	United States	6816101	09-Nov-2004	Granted
ADAPTIVE NOISE FILTERING AND EQUALIZATION FOR OPTIMAL HIGH SPEED MULTILEVEL SIGNAL DECODING	United States	7035361	25-Apr-2006	Granted
METHOD AND SYSTEM FOR CROSSTALK CANCELLATION	United States	7050388	23-May-2006	Granted
METHOD AND SYSTEM FOR ANTENNA INTERFERENCE CANCELLATION	United States	7123676	17-Oct-2006	Granted
MULTILEVEL PULSE POSITION MODULATION FOR EFFICIENT FIBER OPTIC COMMUNICATION	United States	7149256	12-Dec-2006	Granted
INCREASING DATA THROUGHPUT IN OPTICAL FIBER TRANSMISSION SYSTEMS	United States	7173551	06-Feb-2007	Granted
MULTILEVEL SIGNAL CLOCK RECOVERY TECHNIQUE	United States	7212580	01-May-2007	Granted
METHOD AND SYSTEM FOR DECODING MULTILEVEL SIGNALS	United States	7215721	08-May-2007	Granted
INCREASING DATA THROUGHPUT IN OPTICAL FIBER TRANSMISSION SYSTEMS	United States	7307569	11-Dec-2007	Granted
MULTILEVEL PULSE POSITION MODULATION FOR EFFICIENT FIBER OPTIC COMMUNICATION	United States	7352824	01-Apr-2008	Granted
METHOD AND SYSTEM FOR ANTENNA INTERFERENCE CANCELLATION	United States	7366244	29-Apr-2008	Granted
METHOD AND SYSTEM FOR REDUCING SIGNAL INTERFERENCE	United States	7522883	21-Apr-2009	Granted
ADAPTIVE NOISE FILTERING AND EQUALIZATION FOR OPTIMAL HIGH SPEED	United States	7573966	11-Aug-2009	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
MULTILEVEL SIGNAL DECODING				
METHOD AND SYSTEM FOR DECODING MULTILEVEL SIGNALS	United States	7602860	13-Oct-2009	Granted
METHOD AND SYSTEM FOR CROSSTALK CANCELLATIONS	United States	7626916	01-Dec-2009	Granted
METHOD AND SYSTEM FOR SIGNAL EMULATION	United States	11/509112	23-Aug-2006	Pending
FILTER SHAPING USING A SIGNAL CANCELLATION FUNCTION	United States	12/652281	05-Jan-2010	Pending
METHOD AND SYSTEM FOR SLICING A COMMUNICATION SIGNAL	United States	12/578869	14-Oct-2009	Pending
METHOD AND SYSTEM FOR REDUCING SIGNAL INTERFERENCE	United States	12/380654	02-Mar-2009	Pending
METHOD AND SYSTEM FOR CROSSTALK CANCELLATIONS	United States	12/581511	19-Oct-2009	Published
ADAPTIVE NOISE FILTERING AND EQUALIZATION FOR OPTIMAL HIGH SPEED MULTILEVEL SIGNAL DECODING	United States	12/583006	11-Aug-2009	Published
PRE-CONFIGURATION AND CONTROL OF RADIO FREQUENCY NOISE CANCELLATION	United States	12/177099	21-Jul-2008	Pending
NOISE SAMPLING DETECTORS	United States	12/236945	24-Sep-2008	Pending
METHOD AND SYSTEM FOR ANTENNA INTERFERENCE CANCELLATION	United States	12/069236	08-Feb-2008	Pending
HIGH-SPEED ANALOG-TO-DIGITAL CONVERSION WITH IMPROVED ROBUSTNESS TO TIMING UNCERTAINTY	United States	10/706187	12-Nov-2003	Pending
METHOD AND SYSTEM FOR SLICING A COMMUNICATION SIGNAL	United States	11/022112	22-Dec-2004	Pending
METHOD AND SYSTEM FOR AUTOMATIC CONTROL IN AN INTERFERENCE CANCELLATION DEVICE	United States	11/450543	09-Jun-2006	Pending
METHOD AND SYSTEM FOR REDUCING RADIATED EMISSIONS FROM A COMMUNICATIONS CHANNEL	United States	11/789899	26-Apr-2007	Published
FILTER SHAPING USING A SIGNAL CANCELLATION FUNCTION	United States	12/413454	27-Mar-2009	Pending
POWER EXTRACTION FROM SIGNAL SINKS	United States	12/476934	02-Jun-2009	Pending
INTER-PAIR SKEW ADJUSTMENT	United States	12/469450	20-May-2009	Pending
DUPLEXER AND SWITCH ENHANCEMENT	United States	12/432013	29-Apr-2009	Pending

Quellan Inc. – Foreign Registered Patents and Patent Applications

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
METHOD AND SYSTEM FOR DECODING	IL	158211	30-Mar-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
MULTILEVEL SIGNALS			2009	
INCREASING DATA THROUGHPUT IN OPTICAL FIBER TRANSMISSION SYSTEMS	IL	15686	08-Nov- 2008	Granted
METHOD AND SYSTEM FOR CROSSTALK CANCELLATION	GB	2421674	15-Nov- 2006	Granted
METHOD AND SYSTEM FOR DECODING MULTILEVEL SIGNALS	EP	02731304.8	28-Mar- 2002	Pending
METHOD AND SYSTEM FOR DECODING MULTILEVEL SIGNALS	CA	2442922	28-Mar- 2002	Pending
METHOD AND SYSTEM FOR DECODING MULTILEVEL SIGNALS	WO	US02/11108	28-Mar- 2002	Pending
INCREASING DATA THROUGHPUT IN OPTICAL FIBER TRANSMISSION SYSTEMS	WO	US01/50695	21-Dec- 2001	Pending
INCREASING DATA THROUGHPUT IN OPTICAL FIBER TRANSMISSION SYSTEMS	CA	2432801	21-Dec- 2001	Pending
INCREASING DATA THROUGHPUT IN OPTICAL FIBER TRANSMISSION SYSTEMS	EP	01994491.7	21-Dec- 2001	Pending
HIGH-SPEED ADJUSTABLE MULTILEVEL LIGHT MODULATION	WO	US02/14459	09-May- 2002	Pending
ADAPTIVE NOISE FILTERING AND EQUALIZATION FOR OPTIMAL HIGH SPEED MULTILEVEL SIGNAL DECODING	WO	US2003/022237	15-Jul- 2003	Pending
METHOD AND SYSTEM FOR CROSSTALK CANCELLATION	JP	2006-522704	05-Aug- 2004	Pending
METHOD AND SYSTEM FOR CROSSTALK CANCELLATION	KR	7002618/2006	05-Aug- 2004	Pending
METHOD AND SYSTEM FOR CROSSTALK CANCELLATION	DE	112004001455	05-Aug- 2004	Pending
METHOD AND SYSTEM FOR CROSSTALK CANCELLATION	WO	04/025232	05-Aug- 2004	Pending
METHOD AND SYSTEM FOR ANTENNA INTERFERENCE CANCELLATION	EP	04811319.5	17-Nov- 2004	Pending
METHOD AND SYSTEM FOR ANTENNA INTERFERENCE CANCELLATION	JP		17-Nov- 2004	Pending
METHOD AND SYSTEM FOR ANTENNA INTERFERENCE CANCELLATION	KR	7012072/2006	17-Nov- 2004	Pending
METHOD AND SYSTEM FOR ANTENNA INTERFERENCE CANCELLATION	WO	04/038564	17-Nov- 2004	Pending
METHOD AND SYSTEM FOR ANTENNA INTERFERENCE CANCELLATION	HK	07101502.2	08-Feb- 2007	Pending
METHOD AND SYSTEM FOR REDUCING SIGNAL INTERFERENCE	WO	05/045209	14-Dec- 2005	Pending
METHOD AND SYSTEM FOR REDUCING SIGNAL INTERFERENCE	EP	05854008.9	14-Dec- 2005	Pending
METHOD AND SYSTEM FOR REDUCING SIGNAL INTERFERENCE	JP	07-545730	14-Dec- 2005	Pending
METHOD AND SYSTEM FOR REDUCING SIGNAL INTERFERENCE	KR	7016135/2007	14-Dec- 2005	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
METHOD AND SYSTEM FOR AUTOMATIC CONTROL IN AN INTERFERENCE CANCELLATION DEVICE	JP	08-515992	09-Jun-2006	Pending
METHOD AND SYSTEM FOR AUTOMATIC CONTROL IN AN INTERFERENCE CANCELLATION DEVICE	WO	06/022640	09-Jun-2006	Pending
METHOD AND SYSTEM FOR AUTOMATIC CONTROL IN AN INTERFERENCE CANCELLATION DEVICE	TW	95120762	12-Jun-2006	Pending
METHOD AND SYSTEM FOR SIGNAL EMULATION	WO	06/033067	23-Aug-2006	Pending
METHOD AND SYSTEM FOR SIGNAL EMULATION	EP	06802258.1	23-Aug-2006	Pending
METHOD AND SYSTEM FOR SIGNAL EMULATION	JP	08-528149	23-Aug-2006	Pending
METHOD AND SYSTEM FOR SIGNAL EMULATION	KR	7007089/2008	23-Aug-2006	Pending
METHOD AND SYSTEM FOR SIGNAL EMULATION	HK	08112987.2	27-Nov-2008	Pending
METHOD AND SYSTEM FOR REDUCING RADIATED EMISSIONS FROM A COMMUNICATIONS CHANNEL	WO	07/010237	26-Apr-2007	Pending
METHOD AND SYSTEM FOR REDUCING RADIATED EMISSIONS FROM A COMMUNICATIONS CHANNEL	DE	112996991945	26-Apr-2007	Pending
METHOD AND SYSTEM FOR REDUCING RADIATED EMISSIONS FROM A COMMUNICATIONS CHANNEL	KR	7026554-2008	26-Apr-2007	Pending
METHOD AND SYSTEM FOR REDUCING RADIATED EMISSIONS FROM A COMMUNICATIONS CHANNEL	JP	2009-507820	26-Apr-2007	Pending
NOISE CANCELLATION FOR GPS ANTENNA MODULE	WO	09/054500	20-Aug-2009	Pending
NOISE CANCELLATION FOR GPS ANTENNA MODULE	TW	98128166	20-Aug-2009	Published
PRE-CONFIGURATION AND CONTROL OF RADIO FREQUENCY NOISE CANCELLATION	WO	09/51208	21-Jul-2009	Pending
NOISE SAMPLING DETECTORS	WO	2009/057572	18-Sep-2009	Pending
FILTER SHAPING USING A SIGNAL CANCELLATION FUNCTION	TW	99107767	17-Mar-2010	Pending
FILTER SHAPING USING A SIGNAL CANCELLATION FUNCTION	KR	2010-0023665	17-Mar-2010	Pending
FILTER SHAPING USING A SIGNAL CANCELLATION FUNCTION	CN	tbd	26-Mar-2010	Pending
FILTER SHAPING USING A SIGNAL CANCELLATION FUNCTION	EP	10158086.8	26-Mar-2010	Pending
POWER EXTRACTION FROM SIGNAL SINKS	TW	99109006	26-Mar-	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
			2010	
INTER-PAIR SKEW ADJUSTMENT	TW	99109007	26-Mar-2010	Pending
DUPLEXER AND SWITCH ENHANCEMENT	KR	2010-0024227	18-Mar-2010	Pending

Zilker Labs, Inc.. – U.S. Registered Patents and Patent Applications

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
HARDWARE EFFICIENT DIGITAL CONTROL LOOP ARCHITECTURE FOR A POER CONVERTER	United States	7239257	03-Jul-2007	Granted
METHOD FOR ACCURATELY SETTING PARAMETERS INSIDE INTEGRATED CIRCUITS USING INACCURATE EXTERNAL COMPONENTS	United States	7292019	06-Nov-2007	Granted
CURRENT SENSE METHOD	United States	7327130	05-Feb-2008	Granted
METHOD AND APPARATUS FOR IMPROVED DC POWER DELIVERY, MANAGEMENT AND CONFIGURATION	United States	7467309	16-Dec-2008	Granted
METHOD AND APPARATUS FOR IMPROVED DC POWER DELIVERY, MANAGEMENT AND CONFIGURATION	United States	7506179	17-Mar-2009	Granted
TRANSIENT PROCESSING MECHANISM FOR POWER CONVERTERS	United States	7545131	09-Jun-2009	Granted
ADAPTIVE THRESHOLDING TECHNIQUE FOR POWER SUPPLIES DURING MARGINING EVENTS	United States	7568117	28-Jul-2009	Granted
METHODS FOR ACCURATE CURRENT SENSING IN POWER CONVERTERS	United States	7589514	15-Sep-2009	Granted
METHOD FOR USING A MULTI-MASTER MULTI-SLAVE BUS FOR POWER MANAGEMENT	United States	7653757	26-Jan-2010	Granted
METHOD FOR ACCURATELY SETTING PARAMETERS INSIDE INTEGRATED CIRCUITS USING INACCURATE EXTERNAL COMPONENTS	United States	7668607	23-Feb-2010	Granted
AUTONOMOUS SEQUENCING AND FAULT SPREADING	United States	7685320	23-Mar-2010	Granted
POWER MANAGEMENT SYSTEM USING A MULTI-MASTER MULTI-SLAVE BUS AND MULTI-FUNCTION POINT-OF-LOAD REGULATOR	United States	11/425489	26-Jun-2006	Pending
METHOD AND APPARATUS FOR IMPROVED DC POWER DELIVERY, MANAGEMENT AND CONFIGURATION	United States	11/405293	17-Apr-2006	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
TRANSIENT PROCESSING MECHANISM FOR POWER CONVERTERS	United States	12/477,706	03-Jun-2009	Published
METHOD FOR USING A MULTI-MASTER MULTI-SLAVE BUS FOR POWER MANAGEMENT	United States	11/405294	17-Apr-2006	Pending
CONTROL SYSTEM OPTIMIZATION VIA INDEPENDENT PARAMETER ADJUSTMENT	United States	12/118213	09-May-2008	Pending
DEVICE-TO-DEVICE COMMUNICATION BUS FOR DISTRIBUTED POWER MANAGEMENT	United States	12/505218	17-Jul-2009	Published
ADAPTIVE COMPENSATION FOR DIGITAL POWER CONTROLLERS	United States	12/118166	09-May-2008	Pending
CONTROL SYSTEM OPTIMIZATION VIA ADAPTIVE FREQUENCY ADJUSTMENT	United States	12/118260	09-May-2008	Pending
CONTROL SYSTEM OPTIMIZATION VIA DIGITAL DIODE EMULATION	United States	12/118290	09-May-2008	Pending
HIGH PERFORMANCE POWER CONVERSION AND DIGITAL POWER CONTROL	United States	12/118358	09-May-2008	Pending
TRANSIENT PROCESSING MECHANISM FOR POWER CONVERTERS	United States	12/604812	23-Oct-2009	Pending
METHOD FOR PRE-BIAS CORRECTION DURING TURN-ON OF SWITCHING POWER REGULATORS	United States	11/361130	24-Feb-2006	Pending
METHOD FOR CONTROL OF OVERLAP TIMES IN SWITCHING POWER CONVERTERS	United States	11/429484	05-May-2006	Pending
METHOD AND APPARATUS FOR CONTROLLING OPERATING PARAMETERS OF COMPONENTS IN A POWER DISTRIBUTION SYSTEM	United States	11/355703	16-Feb-2006	Pending

Zilker Labs, Inc.. – Foreign Registered Patents and Patent Applications

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
TRANSIENT PROCESSING MECHANISM FOR POWER CONVERTERS	CN	200910246842	23-Oct-2009	Pending
TRANSIENT PROCESSING MECHANISM FOR POWER CONVERTERS	TW	98135898	23-Oct-2009	Pending
TRANSIENT PROCESSING MECHANISM FOR POWER CONVERTERS	DE	202009013410	23-Oct-2009	Pending

Kenet, Inc. – U.S. Registered Patents and Patent Applications.

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
VOLTAGE RANDOM ACCESS MEMORY (VRAM)	United States	7079067	18-Jul-2006	Granted
ANALOG TO DIGITAL CONVERTER CALIBRATION VIA SYNCHRONOUS DEMODULATION	United States	7106230	12-Sep-2006	Granted
GATE BIAS CIRCUIT FOR MOS CHARGE COUPLED DEVICES	United States	7109784	19-Sep-2006	Granted
A CHARGE COMPARATOR WITH LOW INPUT OFFSET	United States	7173558	06-Feb-2007	Granted
MANUFACTURING CCDS IN A CONVENTIONAL CMOS PROCESS	United States	7179676	20-Feb-2007	Granted
CCD CHARGE-SPLITTER ADJUSTMENT BY STATIC CHARGE GRADIENT	United States	7274052	25-Sep-2007	Granted
ANALOG TO DIGITAL CONVERTER CALIBRATION VIA SYNCHRONOUS DEMODULATION	United States	7400280	15-Jul-2008	Granted
METAL-INSULATOR-METAL CAPACITORS	United States	7439570	21-Oct-2008	Granted
ANALOG ERROR CORRECTION FOR A PIPELINED CHARGE-DOMAIN A/D CONVERTER	United States	7535400	19-May-2009	Granted
CHARGE DOMAIN PIPELINED ANALOG-TO-DIGITAL CONVERTER	United States	7570192	04-Aug-2009	Granted
COMMON-MODE CHARGE CONTROL IN A PIPELINED CHARGE-DOMAIN SIGNAL-PROCESSING CIRCUIT	United States	7576586	18-Aug-2009	Granted
VOLTAGE RANDOM ACCESS MEMORY (VRAM)	United States	12/332168	10-Dec-2008	Published
GATE BIAS CIRCUIT FOR MOS CHARGE COUPLED DEVICES	United States	11/522851	18-Sep-2006	Pending
MANUFACTURING CCDS IN A CONVENTIONAL CMOS PROCESS	United States	11/709105	20-Feb-2007	Published
METAL-INSULATOR-METAL CAPACITORS	United States	12/287045	06-Oct-2008	Published
ANALOG ERROR CORRECTION FOR A PIPELINED CHARGE-DOMAIN A/D CONVERTER	United States	12/423652	14-Apr-2009	Pending
COMMON-MODE CHARGE CONTROL IN A PIPELINED CHARGE-DOMAIN SIGNAL-PROCESSING CIRCUIT	United States	12/543130	18-Aug-2009	Pending
CHARGE-DOMAIN PIPELINED CHARGE-REDISTRIBUTION ANALOG-TO-DIGITAL CONVERTER	United States	12/723019	12-Mar-2010	Pending
INCREASING CHARGE CAPACITY OF CHARGE TRANSFER CIRCUITS WITHOUT ALTERING THEIR CHARGE TRANSFER CHARACTERISTICS	United States	12/330270	08-Dec-2008	Published
AVOIDING FLOATING DIFFUSION CONTAMINATION	United States	12/330215	08-Dec-2008	Published
FLASH CONVERTER DIFFERENTIAL	United States	12/330272	08-Dec-2008	Published

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
REFERENCE LADDER AUTO-ZERO CIRCUIT				
FLASH CONVERTER DIFFERENTIAL REFERENCE LADDER ADJUSTMENT WITH STABLE COMMON MODE VOLTAGE	United States	12/330224	08-Dec-2008	Published
BOOSTED CHARGE TRANSFER PIPELINE	United States	11/807914	30-May-2007	Published
CABLE GATEWAY USING A CHARGE- DOMAIN PIPELINE ANALOG TO DIGITAL CONVERTER	United States	12615397	10-Nov-2009	Pending
DOPED PLUG FOR CCD GAPS	United States	11/807911	30-May-2007	Pending
LOW POWER 10 GIGABIT ETHERNET INTERFACE	United States	12/154443	22-May-2008	Published
COMMON-MODE-INSENSITIVE SAMPLER	United States	12/011998	29-Jan-2008	Pending
CHARGE-DOMAIN PIPELINED CHARGE- REDISTRIBUTION ANALOG-TO-DIGITAL CONVERTER	United States	12/007470 6	05-Mar-2008	Pending
BACKGROUND CALIBRATION OF OFFSETS IN INTERLEAVED ANALOG-TO-DIGITAL CONVERTERS	United States	61/220861	26-Jun-2009	Pending
BACKGROUND CALIBRATION OF OFFSETS IN INTERLEAVED ANALOG-TO-DIGITAL CONVERTERS	United States	61/226977	20-Jul-2009	Pending
IMPROVEMENT IN SAMPLER LINEARITY BY SIMULTANEOUS SAMPLING	United States	61/219978	24-Jun-2009	Pending
IMPROVEMENT IN SAMPLER LINEARITY BY SIMULTANEOUS SAMPLING	United States	61308851	26-Feb-2010	Pending
DOPED PLUG FOR CCD GAPS	United States	60/809773	31-May-2006	Pending
A CHARGE COMPARATOR WITH LOW INPUT OFFSET	United States	12/322658	05-Feb-2009	Pending
CORRECTING CHARGE TRANSFER INEFFICIENCY IN A CHARGE COUPLED ANALOG TO DIGITAL CONVERTER	United States	12/494049	29-Jun-2009	Pending

Kenet, Inc. – Foreign Registered Patents and Patent Applications.

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
DEVICE FOR SUBTRACTING/ADDING A CONSTANT AMOUNT OF CHARGE IN A CHARGE-COUPLED DEVICE	KR	2007001504	23-Apr- 2007	Pending
VOLTAGE RANDOM ACCESS MEMORY (VRAM)	WO	2005024137	06-Jul-2005	Pending
VOLTAGE RANDOM ACCESS MEMORY (VRAM)	CA	2573147	06-Jul-2005	Pending
VOLTAGE RANDOM ACCESS MEMORY (VRAM)	EP	05769296.4	06-Jul-2005	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
VOLTAGE RANDOM ACCESS MEMORY (VRAM)	JP	20007520504	06-Jul-2005	Pending
VOLTAGE RANDOM ACCESS MEMORY (VRAM)	KR	7002830	06-Jul-2005	Pending
ANALOG TO DIGITAL CONVERTER CALIBRATION VIA SYNCHRONOUS DEMODULATION	TW	94119264	10-Jun-2005	Pending
ANALOG TO DIGITAL CONVERTER CALIBRATION VIA SYNCHRONOUS DEMODULATION	KR	07/7001066	17-Jun-2005	Pending
ANALOG TO DIGITAL CONVERTER CALIBRATION VIA SYNCHRONOUS DEMODULATION	EP	05760909	17-Jun-2005	Pending
ANALOG TO DIGITAL CONVERTER CALIBRATION VIA SYNCHRONOUS DEMODULATION	WO	06/021568	17-Jun-2005	Published
ANALOG TO DIGITAL CONVERTER CALIBRATION VIA SYNCHRONOUS DEMODULATION	JP	2007516803	17-Jun-2005	Pending
ANALOG TO DIGITAL CONVERTER CALIBRATION VIA SYNCHRONOUS DEMODULATION	CA	2571228	17-Jun-2005	Pending
GATE BIAS CIRCUIT FOR MOS CHARGE COUPLED DEVICES	WO	05/021566	17-Jun-2005	Published
A CHARGE COMPARATOR WITH LOW INPUT OFFSET	WO	05/024007	06-Jul-2005	Pending
CCD CHARGE-SPLITTER ADJUSTMENT BY STATIC CHARGE GRADIENT	WO	2005/023791	06-Jul-2005	Pending
MANUFACTURING CCDS IN A CONVENTIONAL CMOS PROCESS	KR	07/7022768	09-Feb-2006	Pending
MANUFACTURING CCDS IN A CONVENTIONAL CMOS PROCESS	EP	06720633.4	09-Feb-2006	Published
MANUFACTURING CCDS IN A CONVENTIONAL CMOS PROCESS	CA	2603678	09-Feb-2006	Pending
MANUFACTURING CCDS IN A CONVENTIONAL CMOS PROCESS	JP	08/504038	09-Feb-2006	Pending
MANUFACTURING CCDS IN A CONVENTIONAL CMOS PROCESS	TW	95104845	14-Feb-2006	Published
INCREASING CHARGE CAPACITY OF CHARGE TRANSFER CIRCUITS WITHOUT ALTERING THEIR CHARGE TRANSFER CHARACTERISTICS	TW	97147290	05-Dec-2008	Pending
INCREASING CHARGE CAPACITY OF CHARGE TRANSFER CIRCUITS WITHOUT ALTERING THEIR CHARGE TRANSFER CHARACTERISTICS	WO	0131479	08-Dec-2008	Pending
AVOIDING FLOATING DIFFUSION CONTAMINATION	TW	97147289	05-Dec-2008	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
AVOIDING FLOATING DIFFUSION CONTAMINATION	WO	013474	07-Dec- 2008	Pending
BOOSTED CHARGE TRANSFER PIPELINE	TW	96119259	30-May- 2007	Pending
BOOSTED CHARGE TRANSFER PIPELINE	WO	07/012906	31-May- 2007	Published
BOOSTED CHARGE TRANSFER PIPELINE	CN	07/80019871. 6	31-May- 2007	Published
BOOSTED CHARGE TRANSFER PIPELINE	JP	2009513290	31-May- 2007	Published
BOOSTED CHARGE TRANSFER PIPELINE	KR	20087029051	31-May- 2007	Published
BOOSTED CHARGE TRANSFER PIPELINE	EP	07795582.1	31-May- 2007	Published
METAL-INSULATOR-METAL CAPACITORS	EP	07795656.3	01-Jun- 2007	Published
METAL-INSULATOR-METAL CAPACITORS	CN	200780020220	01-Jun- 2007	Published
METAL-INSULATOR-METAL CAPACITORS	TW	96119667	01-Jun- 2007	Pending
METAL-INSULATOR-METAL CAPACITORS	WO	07/013044	01-Jun- 2007	Published
DOPED PLUG FOR CCD GAPS	WO	07/012905	31-May- 2007	Published
CHARGE DOMAIN PIPELINED ANALOG-TO- DIGITAL CONVERTER	EP	08724614.6	18-Jan- 2008	Published
CHARGE DOMAIN PIPELINED ANALOG-TO- DIGITAL CONVERTER	CN	200880002327.5 0	18-Jan- 2008	Published
CHARGE DOMAIN PIPELINED ANALOG-TO- DIGITAL CONVERTER	KR	102009701507 1	18-Jan- 2008	Published
CHARGE DOMAIN PIPELINED ANALOG-TO- DIGITAL CONVERTER	WO	08/000687	18-Jan- 2008	Published
CHARGE DOMAIN PIPELINED ANALOG-TO- DIGITAL CONVERTER	TW	97101976	18-Jan- 2008	Pending
ANALOG ERROR CORRECTION FOR A PIPELINED CHARGE-DOMAIN A/D CONVERTER	WO	08/000825	23-Jan- 2008	Published
ANALOG ERROR CORRECTION FOR A PIPELINED CHARGE-DOMAIN A/D CONVERTER	CN	20080002640. 9	21-Aug- 2009	Published
COMMON-MODE-INSENSITIVE SAMPLER	KR	2009-7015493	29-Jan- 2008	Published
COMMON-MODE-INSENSITIVE SAMPLER	WO	08/001263	29-Jan- 2008	Published
COMMON-MODE-INSENSITIVE SAMPLER	EP	08713358.3	29-Jan- 2008	Published
COMMON-MODE-INSENSITIVE SAMPLER	CN	200880003289	29-Jan- 2008	Published

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
COMMON-MODE CHARGE CONTROL IN A PIPELINED CHARGE-DOMAIN SIGNAL-PROCESSING CIRCUIT	WO	08/01679	08-Feb-2008	Pending
COMMON-MODE CHARGE CONTROL IN A PIPELINED CHARGE-DOMAIN SIGNAL-PROCESSING CIRCUIT	KR	09-7015494	23-Jul-2009	Pending
COMMON-MODE CHARGE CONTROL IN A PIPELINED CHARGE-DOMAIN SIGNAL-PROCESSING CIRCUIT	EP	08725325.8	10-Aug-2009	Pending
CHARGE-DOMAIN PIPELINED CHARGE-REDISTRIBUTION ANALOG-TO-DIGIAL CONVERTER	DE	112008000602	05-Mar-2008	Published
CHARGE-DOMAIN PIPELINED CHARGE-REDISTRIBUTION ANALOG-TO-DIGIAL CONVERTER	WO	08/002933	05-Mar-2008	Pending
CHARGE-DOMAIN PIPELINED CHARGE-REDISTRIBUTION ANALOG-TO-DIGIAL CONVERTER	CN	80007242.6	25-Sep-2009	Pending

Intersil Americas, Inc. – U.S. Registered Patents and Pending Applications

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
PHASE-LOCK LOOP HAVING PROGRAMMABLE BANDWIDTH	United States	6853252	08-Feb-2005	Granted
SYNCHRONOUS-RECTIFIED DC TO DC CONVERTER WITH IMPROVED CURRENT SENSING AND ASSOCIATED METHODS	United States	RE38487	06-Apr-2004	Granted
SYNCHRONOUS-RECTIFIED DC TO DC CONVERTER WITH IMPROVED CURRENT SENSING AND ASSOCIATED METHODS	United States	RE38940	24-Jan-2006	Granted
MULTI-PHASE CONVERTER WITH BALANCED CURRENTS	United States	RE38454	09-Mar-2004	Granted
MULTI-PHASE CONVERTER WITH BALANCED CURRENTS	United States	RE38846	25-Oct-2005	Granted
Current source with supply current minimizing	United States	US 5585712	12/17/1996	Granted
HIGH EFFICIENCY POWER MOS SWITCH	United States	7076070	11-Jul-2006	Granted
CURRENT-CONTROLLED CARRIER TRACKING FILTER FOR IMPROVED	United States	6549590	15-Apr-2003	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SPURIOUS SIGNAL SUPPRESSION				
WAFER TRENCH ARTICLE AND PROCESS	United States	6551897	22-Apr-2003	Granted
DC-TO-DC CONVERTER WITH INDUCTOR CURRENT SENSING AND RELATED METHODS	United States	5982160	09-Nov-1999	Granted
DEVICES WITH PATTERNED WELLS AND METHOD FOR FORMING SAME	United States	6979885	27-Dec-2005	Granted
REFERENCE CURRENT/VOLTAGE GENERATOR HAVING REDUCED SENSITIVITY TO VARIATIONS IN POWER SUPPLY VOLTAGE	United States	6522117	18-Feb-2003	Granted
LASER DECAPSULATION APPARATUS AND METHOD	United States	7166186	23-Jan-2007	Granted
LASER DECAPSULATION APPARATUS AND METHOD	United States	7316936	08-Jan-2008	Granted
METHOD FOR MAKING A DIFFUSED BACK-SIDE LAYER ON A BONDED-WAFER WITH A THICK BOND OXIDE	United States	6867495	15-Mar-2005	Granted
METHOD FOR MAKING A DIFFUSED BACK-SIDE LAYER ON A BONDED-WAFER WITH A THICK BOND OXIDE	United States	6946364	20-Sep-2005	Granted
METHOD FOR MAKING A DIFFUSED BACK-SIDE LAYER ON A BONDED-WAFER WITH A THICK BOND OXIDE	United States	7285475	23-Oct-2007	Granted
BONDED SUBSTRATE FOR AN INTEGRATED CIRCUIT CONTAINING A PLANAR INTRINSIC GETTERING ZONE (as amended)	United States	6825532	30-Nov-2004	Granted
BONDED SUBSTRATE FOR AN INTEGRATED CIRCUIT CONTAINING A PLANAR INTRINSIC GETTERING ZONE (as amended)	United States	7052973	30-May-2006	Granted
METHOD OF FORMING RESISTIVE CONTACTS ON INTEGRATED CIRCUITS WITH MOBILITY SPOILING IONS INCLUDING HIGH RESISTIVE CONTACTS AND LOW RESISTIVITY SILICIDE CONTACTS	United States	6667523	23-Dec-2003	Granted
SYNCHRONOUS-RECTIFIED DC TO DC CONVERTER WITH IMPROVED CURRENT SENSING AND ASSOCIATED METHODS	United States	6246220	12-Jun-2001	Granted
MULTI-PHASE CONVERTER WITH	United States	6278263	21-Aug-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
BALANCED CURRENTS			2001	
MULTI-PHASE CONVERTER WITH BALANCED CURRENTS	United States	RE40593	02-Dec- 2008	Granted
SELF-ALIGNMENT OF SEPARATED REGIONS IN A LATERAL MOSFET STRUCTURE OF AN INTEGRATED CIRCUIT	United States	6822292	23-Nov- 2004	Granted
SELF-ALIGNMENT OF SEPARATED REGIONS IN A LATERAL MOSFET STRUCTURE OF AN INTEGRATED CIRCUIT	United States	6974753	13-Dec- 2005	Granted
SELF-ALIGNMENT OF SEPARATED REGIONS IN A LATERAL MOSFET STRUCTURE OF AN INTEGRATED CIRCUIT	United States	7161223	09-Jan-2007	Granted
SELF-ALIGNMENT OF SEPARATED REGIONS IN A LATERAL MOSFET STRUCTURE OF AN INTEGRATED CIRCUIT	United States	7410860	12-Aug- 2008	Granted
SELF-ALIGNMENT OF SEPARATED REGIONS IN A LATERAL MOSFET STRUCTURE OF AN INTEGRATED CIRCUIT	United States	7687336	30-Mar- 2010	Granted
ESD PROTECTION NETWORKS UTILIZING PRECHARGED BUS LINES	United States	6924963	02-Aug- 2005	Granted
COMPLEMENTARY METAL OXIDE SEMICONDUCTOR WITH IMPROVED SINGLE EVENT PERFORMANCE	United States	6653708	25-Nov- 2003	Granted
POWER DEVICE DRIVING CIRCUIT AND ASSOCIATED METHODS	United States	6507226	14-Jan-2003	Granted
REDUNDANT LATCH CIRCUIT AND ASSOCIATED METHODS	United States	6504411	07-Jan-2003	Granted
OVERVOLTAGE PROTECTION CIRCUIT FOR BIDIRECTIONAL TRANSMISSION GATE	United States	6633470	14-Oct- 2003	Granted
TEMPERATURE-INSENSITIVE OUTPUT CURRENT LIMITER NETWORK FOR ANALOG INTEGRATED CIRCUIT	United States	6570431	27-May- 2003	Granted
PRECISION, LOW-POWER TRANSIMPEDANCE CIRCUIT WITH DIFFERENTIAL CURRENT SENSE INPUTS AND SINGLE ENDED VOLTAGE OUTPUT	United States	6400187	04-Jun- 2002	Granted
PRECISION LOW POWER OPERATIONAL AMPLIFIER WITH GAIN	United States	6411164	25-Jun- 2002	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
INVARIANT BANDWIDTH				
MULTISTAGE PRECISION, LOW INPUT/OUTPUT OVERHEAD, LOW POWER, HIGH OUTPUT IMPEDANCE AND LOW CROSSTALK CURRENT MIRROR	United States	6507236	14-Jan-2003	Granted
MECHANISM FOR MINIMIZING CURRENT MIRROR TRANSISTOR BASE CURRENT ERROR FOR LOW OVERHEAD VOLTAGE APPLICATIONS	United States	6518832	11-Feb-2003	Granted
REDUCED PROPAGATION DELAY CURRENT MODE CASCADED ANALOG-TO-DIGITAL CONVERTER AND THRESHOLD BIT CELL THEREFOR	United States	6492930	10-Dec-2002	Granted
TRANSCONDUCTANCE AMPLIFIER BASED PRECISION HALF WAVE AND FULL WAVE RECTIFIER CIRCUIT	United States	6452450	17-Sep-2002	Granted
DUAL-EDGE FUNCTION CLOCK GENERATOR AND METHOD OF DERIVING CLOCKING SIGNALS FOR EXECUTION REDUCED INSTRUCTION SEQUENCES IN A RE-PROGRAMMABLE I/O INTERFACE	United States	6664833	16-Dec-2003	Granted
HERMETICALLY SEALED INTEGRATED CIRCUIT PACKAGE INCORPORATING PRESSURE RELIEF VALVE FOR EQUALIZING INTERIOR AND EXTERIOR PRESSURES WHEN PLACED IN SPACEBORNE ENVIRONMENT	United States	6448637	10-Sep-2002	Granted
LATERAL DMOS STRUCTURE WITH LATERAL EXTENSION STRUCTURE FOR REDUCED CHARGE TRAPPING IN GATE OXIDE	United States	6894349	17-May-2005	Granted
LATERAL DMOS STRUCTURE WITH LATERAL EXTENSION STRUCTURE FOR REDUCED CHARGE TRAPPING IN GATE OXIDE	United States	7655515	02-Feb-2010	Granted
INTEGRATED CIRCUIT WITH CURRENT-LIMITED POWER OUTPUT AND ASSOCIATED METHOD	United States	6603358	05-Aug-2003	Granted
INTEGRATED CIRCUIT WITH CURRENT SENSE CIRCUIT AND ASSOCIATED METHODS	United States	6727745	27-Apr-2004	Granted
INTEGRATED CIRCUIT WITH A MOS	United States	6765247	20-Jul-2004	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
STRUCTURE HAVING REDUCED PARASITIC BIPOLAR TRANSISTOR ACTION				
INTEGRATED CIRCUIT WITH A MOS STRUCTURE HAVING REDUCED PARASITIC BIPOLAR TRANSISTOR ACTION	United States	6902967	07-Jun- 2005	Granted
REDUNDANT COMPARATOR DESIGN FOR IMPROVED OFFSET VOLTAGE AND SINGLE EVENT EFFECTS HARDNESS	United States	6563347	13-May- 2003	Granted
AN OPERATIONAL AMPLIFIER INCLUDING A RIGHT-HALF PLANE ZERO REDUCTION CIRCUIT AND RELATED METHOD	United States	6538511	25-Mar- 2003	Granted
SYMBOL TIMING RECOVERY BASED ON COMPLEX SAMPLE MAGNITUDE	United States	5671257	23-Sep- 1997	Granted
METHOD AND APPARATUS FOR TRANSLATING DIGITAL DATA INTO AN ANALOG SIGNAL	United States	5774084	30-Jun- 1998	Granted
CURRENT LIMITING SWITCH AND RELATED METHOD	United States	6525919	25-Feb- 2003	Granted
MOS INTEGRATED CIRCUIT WITH REDUCED ON RESISTANCE	United States	6552392	22-Apr- 2003	Granted
MOS INTEGRATED CIRCUIT WITH REDUCED ON RESISTANCE	United States	6897103	24-May- 2005	Granted
SUBSCRIBER LINE INTERFACE CIRCUIT (SLIC) INCLUDING A TRANSIENT OUTPUT CURRENT LIMIT CIRCUIT AND RELATED METHOD	United States	7167557	23-Jan-2007	Granted
ROTATIONALLY INVARIANT DIGITAL COMMUNICATIONS	United States	6392500	21-May- 2002	Granted
DISTORTION-COMPENSATED DIGITAL COMMUNICATIONS RECEIVER AND METHOD THEREFOR	United States	6507628	14-Jan-2003	Granted
PRAGMATIC TRELLIS-CODED DIGITAL COMMUNICATION WITH MULTI- STAGE BRANCH METRICS	United States	6236685	22-May- 2001	Granted
CONSTRAINED-ENVELOPE TRANSMITTER AND METHOD THEREFOR	United States	6104761	15-Aug- 2000	Granted
CONSTRAINED-ENVELOPE TRANSMITTER AND METHOD THEREFOR	United States	6366619	02-Apr- 2002	Granted
DIGITAL COMMUNICATION RECEIVER	United States	6442217	27-Aug-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
WITH DIGITAL, IF, I-Q BALANCER			2002	
COMMUNICATION SYSTEM WITH END-TO-END QUADRATURE BALANCE CONTROL	United States	6222878	24-Apr-2001	Granted
QPSK/QBL-MSK WAVEFORM ENHANCEMENT	United States	5818867	06-Oct-1998	Granted
RAPID SYNCHRONIZATION FOR COMMUNICATION SYSTEMS	United States	5818832	06-Oct-1998	Granted
RAPID SYNCHRONIZATION FOR COMMUNICATION SYSTEMS	United States	6041088	21-Mar-2000	Granted
SPATIALLY REDUNDANT AND COMPLEMENTARY SEMICONDUCTOR DEVICE-BASED, SINGLE EVENT TRANSIENT-RESISTANT LINEAR AMPLIFIER CIRCUIT ARCHITECTURE	United States	6525590	25-Feb-2003	Granted
TRELLIS CODED MODULATION COMMUNICATIONS USING PILOT BITS TO RESOLVE PHASE AMBIGUITIES	United States	5878085	02-Mar-1999	Granted
SIGNAL CONVERTER USING MULTIPLE DATA STREAMS AND METHOD THEREFOR	United States	5870047	09-Feb-1999	Granted
ROTATIONALLY INVARIANT PRAGMATIC TRELLIS-CODED DIGITAL COMMUNICATION SYSTEM AND METHOD THEREFOR	United States	5995551	30-Nov-1999	Granted
PRAGMATIC ENCODER AND METHOD THEREFOR	United States	5910967	08-Jun-1999	Granted
PRAGMATIC DECODER AND METHOD THEREFOR	United States	6078625	20-Jun-2000	Granted
DATA COMMUNICATION SYSTEM AND METHOD THEREFOR	United States	6005897	21-Dec-1999	Granted
PRAGMATIC TRELLIS-CODED MODULATION SYSTEM AND METHOD THEREFOR	United States	6097764	01-Aug-2000	Granted
PHASE-NOISE COMPENSATED DIGITAL COMMUNICATION RECEIVER AND METHOD THEREFOR	United States	6151368	21-Nov-2000	Granted
PHASE-NOISE COMPENSATED DIGITAL COMMUNICATION RECEIVER AND METHOD THEREFOR	United States	6363124	26-Mar-2002	Granted
DIGITAL TUNER	United States	6141389	31-Oct-2000	Granted
AN ANALOG TO DIGITAL CONVERTER USING SUBRANGING AND	United States	6570523	27-May-2003	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
INTERPOLATION				
CALIBRATION OF RESISTOR LADDER USING DIFFERENCE MEASUREMENT AND PARALLEL RESISTIVE CORRECTION	United States	6628216	30-Sep-2003	Granted
SYSTEM AND METHOD OF DC CALIBRATION OF AMPLIFIERS	United States	6714886	30-Mar-2004	Granted
TRACK AND HOLD WITH DUAL PUMP CIRCUIT	United States	6731155	04-May-2004	Granted
A METHOD FOR FABRICATING ENHANCED EPROM STRUCTURES WITH ACCENTUATED HOT ELECTRON GENERATION REGIONS	United States	6921690	26-Jul-2005	Granted
REMOTE POWER AMPLIFIER LINEARIZATION	United States	7088958	08-Aug-2006	Granted
SEALED NITRIDE LAYER FOR INTEGRATED CIRCUITS	United States	7605445	20-Oct-2009	Granted
THERMAL COMPENSATED CURRENT SENSING OF INTRINSIC POWER CONVERTER ELEMENTS	United States	6812677	02-Nov-2004	Granted
THERMAL COMPENSATED CURRENT SENSING OF INTRINSIC POWER CONVERTER ELEMENTS	United States	6833690	21-Dec-2004	Granted
THERMAL COMPENSATED CURRENT SENSING OF INTRINSIC POWER CONVERTER ELEMENTS	United States	6870352	22-Mar-2005	Granted
ADJUSTABLE INTEGRATED THERMAL COMPENSATION METHOD FOR ELECTRONIC CIRCUITS UTILIZING TEMPERATURE-DEPENDENT SENSING ELEMENTS	United States	6687105	03-Feb-2004	Granted
MAGNETIC THIN FILM INDUCTORS	United States	6700472	02-Mar-2004	Granted
MAGNETIC THIN FILM INDUCTORS	United States	6822548	23-Nov-2004	Granted
ELECTROLUMINESCENT DRIVER CIRCUIT	United States	6693387	17-Feb-2004	Granted
ELECTROLUMINESCENT DRIVER CIRCUIT	United States	7151344	19-Dec-2006	Granted
A SEMICONDUCTOR DEVICE MANUFACTURING WITH A REDUCED MASK COUNT BURIED LAYER	United States	6624497	23-Sep-2003	Granted
INTEGRATED CIRCUIT FOR GENERATING A PLURALITY OF DIRECT CURRENT (DC) OUTPUT VOLTAGES	United States	7023187	04-Apr-2006	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
CONSTRAINED-ENVELOPE DIGITAL COMMUNICATIONS TRANSMITTER AND METHOD THEREFOR	United States	6999522	14-Feb-2006	Granted
DIGITAL TRANSMITTER WITH CONSTRAINED ENVELOPE AND SPECTRAL REGROWTH OVER A PLURALITY OF CARRIERS	United States	6928121	09-Aug-2005	Granted
PROGRAMMABLE SUBSCRIBER LINE CIRCUIT PARTITIONED INTO HIGH VOLTAGE INTERFACE AND DIGITAL CONTROL SUBSECTIONS	United States	7050577	23-May-2006	Granted
PROGRAMMABLE SUBSCRIBER LINE CIRCUIT PARTITIONED INTO HIGH VOLTAGE INTERFACE AND DIGITAL CONTROL SUBSECTIONS	United States	7260214	21-Aug-2007	Granted
ACTIVE MODE LINE VOLTAGE REGULATOR FOR RINGING SUBSCRIBER LINE INTERFACE CIRCUIT	United States	7130414	31-Oct-2006	Granted
INTEGRATED CIRCUIT WITH A MOS CAPACITOR	United States	6835628	28-Dec-2004	Granted
INTEGRATED CIRCUIT WITH A MOS CAPACITOR	United States	7042064	09-May-2006	Granted
DC-TO-DC CONVERTER WITH FAST OVERRIDE FEEDBACK CONTROL AND ASSOCIATED METHODS	United States	6696825	24-Feb-2004	Granted
POWER AMPLIFIER LINEARIZER THAT COMPENSATES FOR LONG-TIME CONSTANT MEMORY EFFECTS AND METHOD THEREFOR	United States	6731168	04-May-2004	Granted
SYNTHETIC RIPPLE REGULATOR	United States	6791306	09-Sep-2004	Granted
SYNTHETIC RIPPLE REGULATOR	United States	7132820	07-Nov-2006	Granted
PROGRAMMABLE CURRENT-SENSING CIRCUIT PROVIDING CONTINUOUS TEMPERATURE COMPENSATION FOR DC-DC CONVERTER	United States	RE40915	15-Sep-2009	Granted
DISCRETE STEP TEMPERATURE COMPENSATED CURRENT SENSING TECHNIQUE FOR DC TO DC	United States	6700365	02-Mar-2004	Granted
EFFICIENT BUCK TOPOLOGY DC-DC POWER STAGE UTILIZING MONOLITHIC N-CHANNEL UPPER FET AND PILOT CURRENT SENSING	United States	6734656	11-May-2004	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
PHASED DETECTOR AND METHOD FOR A SHORTENING PHASE-ERROR-CORRECTION PULSE	United States	7471756	30-Dec-2008	Granted
A METHOD OF FABRICATING ENHANCED EPROM STRUCTURES WITH ACCENTUATED HOT ELECTRON GENERATION REGIONS	United States	6492225	10-Dec-2002	Granted
AN ENHANCED EPROM STRUCTURES WITH ACCENTUATED HOT ELECTRON GENERATION REGIONS	United States	6621116	16-Sep-2003	Granted
ENHANCED EPROM STRUCTURES WITH ACCENTUATED HOT ELECTRON GENERATION REGIONS	United States	6566705	20-May-2003	Granted
A SEMICONDUCTOR DEVICE MANUFACTURING WITH A REDUCED MASK COUNT BURIED LAYER PROCESS	United States	6979624	27-Dec-2005	Granted
NUMERICALLY MODELING INDUCTIVE CIRCUIT ELEMENTS	United States	6775807	10-Aug-2004	Granted
NUMERICALLY MODELING INDUCTIVE CIRCUIT ELEMENTS	United States	7310595	18-Dec-2007	Granted
NPN BASE FOR IMPROVED PERFORMANCE	United States	6822314	23-Nov-2004	Granted
METHOD AND CIRCUIT FOR SCALING AND BALANCING INPUT AND OUTPUT CURRENTS IN A MULTI-PHASE DC-DC CONVERTER USING DIFFERENT INPUT VOLTAGES	United States	6897636	24-May-2005	Granted
MODIFIED BROKAW CELL-BASED CIRCUIT FOR GENERATING OUTPUT CURRENT THAT VARIES LINEARLY WITH TEMPERATURE	United States	6836160	28-Dec-2004	Granted
CLOSED LOOP DIODE EMULATOR FOR DC-DC CONVERTER	United States	6815936	09-Nov-2004	Granted
VOLTAGE REFERENCE FILTER FOR SUBSCRIBER LINE INTERFACE CIRCUIT	United States	6950514	27-Sep-2005	Granted
ARRANGEMENT FOR BACK-BIASING MULTIPLE INTEGRATED CIRCUIT SUBSTRATES AT MAXIMUM SUPPLY VOLTAGE AMONG ALL CIRCUITS	United States	6765290	20-Jul-2004	Granted
BIPOlar TRANSISTOR FOR AN INTEGRATED CIRCUIT HAVING VARIABLE VALUE EMITTER BALLAST RESISTORS	United States	6946720	20-Sep-2005	Granted
BIPOlar TRANSISTOR FOR AN	United States	7314791	01-Jan-2008	Granted

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INTEGRATED CIRCUIT HAVING VARIABLE VALUE EMITTER BALLAST RESISTORS				
BIPOLAR TRANSISTOR FOR AN INTEGRATED CIRCUIT HAVING VARIABLE VALUE EMITTER BALLAST RESISTORS	United States	7564117	21-Jul-2009	Granted
METHOD OF SETTING BI-DIRECTIONAL OFFSET IN A PWM CONTROLLER USING A SINGLE PIN	United States	6703893	09-Mar- 2004	Granted
SMOOTH VOLTAGE REGULATION TRANSITION CIRCUIT HAVING FAST RECOVERY	United States	7088015	08-Aug- 2006	Granted
PWM CONTROLLER WITH INTEGRATED PLL	United States	7269217	11-Sep- 2007	Granted
BANDGAP REFERENCE CIRCUIT FOR LOW SUPPLY VOLTAGE APPLICATIONS	United States	6914475	05-Jul-2005	Granted
CHARGE PUMP DRIVE SIGNAL RECOVERY CIRCUIT	United States	6738273	18-May- 2004	Granted
DIGITAL DIODE EMULATION FOR DC/DC CONVERTERS	United States	6643145	04-Nov- 2003	Granted
NON-LINEAR CURRENT GENERATOR FOR HIGH-ORDER CURVATURE COMPENSATED REFERENCES	United States	6791307	14-Sep- 2004	Granted
TRANSIENT-PHASE PWM POWER SUPPLY AND METHOD	United States	7109689	19-Sep- 2006	Granted
MODE-DEPENDENT, MULTIPLE BIAS- DRIVEN BATTERY SWITCH FOR SUBSCRIBER LINE INTERFACE CIRCUIT	United States	7003103	21-Feb- 2006	Granted
MODE-DEPENDENT, MULTIPLE BIAS- DRIVEN BATTERY SWITCH FOR SUBSCRIBER LINE INTERFACE CIRCUIT	United States	7260103	21-Jul-2007	Granted
ENHANCED HIGH VOLTAGE INTERFACE FOR PARTITIONED SUBSCRIBER LINE INTERFACE CIRCUIT	United States	7206405	17-Apr- 2007	Granted
CONSTANT DEADTIME CONTROL IN A FEED FORWARD ENABLED PULSE WIDTH MODULATOR CONTROLLER	United States	6819154	16-Nov- 2004	Granted
LI-ION/LI-POLYMER BATTERY CHARGER CONFIGURED TO BE DC-POWERED FROM MULTIPLE TYPES OF WALL ADAPTERS	United States	6844705	18-Jan-2005	Granted
LI-ION/LI-POLYMER BATTERY CHARGER CONFIGURED TO BE DC-POWERED	United States	6917184	12-Jul-2005	Granted

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FROM MULTIPLE TYPES OF WALL ADAPTERS				
LI-ION/LI-POLYMER BATTERY CHARGER CONFIGURED TO BE DC-POWERED FROM MULTIPLE TYPES OF WALL ADAPTERS	United States	6998820	14-Feb-2006	Granted
LI-ION/LI-POLYMER BATTERY CHARGER CONFIGURED TO BE DC-POWERED FROM MULTIPLE TYPES OF WALL ADAPTERS	United States	7141954	28-Nov-2006	Granted
ROBUST FRACTIONAL CLOCK-BASED PULSE GENERATOR FOR DIGITAL PULSE WIDTH MODULATOR	United States	6819190	16-Nov-2004	Granted
HIGH RESOLUTION DIGITAL PULSE WIDTH MODULATOR FOR DC-DC VOLTAGE CONVERTER	United States	7206343	17-Apr-2007	Granted
INTEGRATED POTS/DSL LINE DRIVER WITH FLOATING SUPPLY VOLTAGE	United States	6931108	16-Aug-2005	Granted
ELECTRONIC DEVICE INCLUDING MULTIPHASE SWITCHING REGULATOR AND RELATED METHODS	United States	6791304	14-Sep-2004	Granted
MARGINING PIN INTERFACE AND CONTROL CIRCUIT	United States	6798260	28-Sep-2004	Granted
MARGINING PIN INTERFACE CIRCUIT	United States	6788229	07-Sep-2004	Granted
ABSOLUTE VALUE CIRCUIT	United States	6724233	20-Apr-2004	Granted
HIGH BANDWIDTH FEED-FORWARD OSCILLATOR	United States	6930520	16-Aug-2005	Granted
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	United States	6922044	26-Jul-2005	Granted
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	United States	7019502	28-Mar-2006	Granted
MULTIPHASE CONVERTER CONTROLLER USING SINGLE GAIN RESISTOR	United States	6977489	20-Dec-2005	Granted
PWM-BASED DC-DC CONVERTER WITH ASSURED DEAD TIME CONTROL EXHIBITING NO SHOTT-THROUGH CURRENT AND INDEPENDENT OF TYPE OF FET USED	United States	6940262	06-Sep-2005	Granted
COMPENSATION SAMPLE AND HOLD	United States	6958596	25-Oct-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
FOR VOLTAGE REGULATOR AMPLIFIER			2005	
MECHANISM FOR PROVIDING OVER-VOLTAGE PROTECTION DURING POWER UP OF DC-DC CONVERTER	United States	6873191	29-Mar-2005	Granted
MECHANISM FOR PROVIDING OVER-VOLTAGE PROTECTION DURING POWER UP OF DC-DC CONVERTER	United States	7518430	14-Apr-2009	Granted
SOFT START PRECHARGE CIRCUIT FOR DC POWER SUPPLY	United States	6998829	14-Feb-2006	Granted
LOW POWER, AREA-EFFICIENT CIRCUIT TO PROVIDE CLOCK SYNCHRONIZATION	United States	6828830	07-Dec-2004	Granted
TIME DIVISION MULTIPLEXED, PILOTED CURRENT MONITORING IN A SWITCHED MODE DC-DC VOLTAGE CONVERTER AND PHASE CURRENT MEASUREMENT CALIBRATION FOR A MULTIPHASE CONVERTER	United States	6906536	14-Jun-2005	Granted
LINE MODELING TOOL	United States	7110933	19-Sep-2006	Granted
OPTICAL PICK-UP UNITS AND LASER DRIVERS WITH INCREASED FUNCTIONALITY	United States	7317674	08-Jan-2008	Granted
ACTIVE TRANSIENT RESPONSE WITH A LOW INDUCTOR	United States	6903914	07-Jun-2005	Granted
TECHNIQUE FOR MEASURING TEMPERATURE AND CURRENT VIA A MOSFET OF A SYNCHRONOUS BUCK VOLTAGE CONVERTER	United States	6946897	20-Sep-2005	Granted
PARTICULATE REMOVAL FROM AN ELECTROSTATIC CHUCK	United States	7097714	29-Aug-2006	Granted
DC-TO-DC POWER REGULATOR HAVING NON-LINEAR LOAD LINE AND AUTOMATIC LEAKAGE CURRENT OFFSET ADJUSTMENT	United States	6995549	07-Feb-2006	Granted
BACKSIDE FAILURE ANALYSIS OF INTEGRATED CIRCUITS	United States	7063987	20-Jun-2006	Granted
AC-DC ADAPTER INTERFACE AND BATTERY CHARGER HAVING HIGH SPEED BATTERY CHARGER CURRENT FOLDBACK WHEN ADAPTER CURRENT DEMAND EXCEEDS PRESCRIBED LIMIT	United States	7199558	13-Apr-2007	Granted
ACTIVE AREA BONDING COMPATIBLE HIGH CURRENT STRUCTURES	United States	7005369	28-Feb-2006	Granted

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ACTIVE AREA BONDING COMPATIBLE HIGH CURRENT STRUCTURES	United States	7224074	29-May- 2007	Granted
MULTIPLE CHANNEL PROGRAMMABLE GAMMA CORRECTION VOLTAGE GENERATOR	United States	7446747	04-Nov- 2008	Granted
ASSYMETRICAL MULTIPHASE DC-DC POWER CONVERTER	United States	6995548	07-Feb- 2006	Granted
MULTIPLEXED HIGH VOLTAGE DC-AC DRIVER	United States	6911790	28-Jun- 2005	Granted
CONTROLLER FOR FET PASS DEVICE	United States	6919758	19-Jul-2005	Granted
CASCADABLE CURRENT-MODE REGULATOR	United States	7061215	13-Jun- 2006	Granted
OUTPUT CURRENT SHARING	United States	7301317	27-Nov- 2007	Granted
PROGRAMMABLE BANDWIDTH AND FREQUENCY SLEWING FOR PHASE- LOCK LOOP	United States	6998890	14-Feb- 2006	Granted
CURRENT LIMITING CIRCUIT WITH RAPID RESPONSE FEEDBACK LOOP	United States	7005924	28-Feb- 2006	Granted
SYSTEM AND METHOD FOR DECAPSULATING AN ENCAPSULATED OBJECT	United States	7326305	05-Feb- 2008	Granted
INDUCTOR CURRENT SENSING SCHEME FOR PWM REGULATOR	United States	7106035	12-Sep- 2006	Granted
CLOCKED, CASCADING, CURRENT- MODE REGULATOR WITH HIGH NOISE IMMUNITY AND ARBITRARY PHASE COUNT	United States	7002325	21-Feb- 2006	Granted
STARTUP CIRCUIT FOR A DC-DC CONVERTER	United States	7038514	02-May- 2006	Granted
MULTI-CHANNEL DRIVER INTERFACE CIRCUIT FOR INCREASING PHASE COUNT IN A MULTI-PHASE DC-DC CONVERTER	United States	7026798	11-Apr- 2006	Granted
TRACKING SOFT START CIRCUIT FOR GENERATING A PLURALITY OF SOFT START VOLTAGES WHERE ALL SOFT START VOLTAGES ARE PREVENTED UNTIL ALL HAVE BEEN BROUGHT TO THE SAME PRESCRIBED STATE OF OPERATION	United States	7075804	11-Jul-2006	Granted
HIGH VOLTAGE DIFFERENTIAL AMPLIFIER USING LOW VOLTAGE DEVICES	United States	6965266	15-Nov- 2005	Granted

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METHOD OF CONTROLLING MULTIPLE PARALLEL CONVERSION PATHS	United States	7259473	21-Aug-2007	Granted
METHOD AND STRUCTURE FOR NON-SINGLE-POLYCRYSTALLINE CAPACITOR IN AN INTEGRATED CIRCUIT	United States	7098103	29-Aug-2006	Granted
SYSTEM AND METHOD OF DETECTING PHASE BODY DIODE USING A COMPARATOR IN A SYNCHRONOUS RECTIFIED FET DRIVER	United States	7031175	18-Apr-2006	Granted
MULTIPHASE DC-DC CONVERTER WITH REDUCED RIPPLE	United States	7084613	01-Aug-2006	Granted
TRANSCONDUCTANCE AMPLIFIER WITH MULTI-EMITTER STRUCTURE FOR CURRENT BALANCE IN MULTI-PHASE SYNTHETIC RIPPLE REGULATOR	United States	7015757	21-Mar-2006	Granted
PRECISION MARGINING CIRCUITRY	United States	6975163	13-Dec-2005	Granted
LINEAR PREDICTIVE CONTROLLER	United States	7038432	02-May-2006	Granted
RADIATION HARDENED BIPOLAR JUNCTION TRANSISTOR	United States	7029981	18-Apr-2006	Granted
RADIATION HARDENED BIPOLAR JUNCTION TRANSISTOR	United States	7187056	06-Mar-2007	Granted
METHOD OF MAKING BIPOLAR TRANSISTORS AND RESULTING PRODUCT	United States	7067383	27-Jun-2006	Granted
METHOD OF MAKING BIPOLAR TRANSISTORS AND RESULTING PRODUCT	United States	7327012	05-Feb-2008	Granted
DIGITALLY CONFIGURABLE MULTIPLEXER/DE-MULTIPLEXER	United States	7386015	10-Jun-2008	Granted
ON-CHIP STRUCTURE FOR ELECTROSTATIC DISCHARGE (ESD) PROTECTION	United States	7202114	10-Apr-2007	Granted
ON-CHIP STRUCTURE FOR ELECTROSTATIC DISCHARGE (ESD) PROTECTION	United States	7601991	13-Oct-2009	Granted
PROGRAMMABLE BANDWIDTH DURING START-UP FOR PHASE-LOCK LOOP	United States	7023250	04-Apr-2006	Granted
HIGH VOLTAGE GATE DRIVER USING A LOW VOLTAGE MULTI-LEVEL CURRENT PULSE TRANSLATOR	United States	7088151	08-Aug-2006	Granted
STARTUP CIRCUIT FOR CONVERTER	United States	7034586	25-Apr-	Granted

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WITH PRE-BIASED LOAD			2006	
RAIL-RAIL CURRENT SENSE AMPLIFIER	United States	7102335	05-Sep-2006	Granted
HIGH VOLTAGE FLOATING CURRENT SENSE AMPLIFIER	United States	7015728	21-Mar-2006	Granted
SYSTEM AND METHOD FOR AUTHENTICATION	United States	7512794	31-Mar-2009	Granted
HIGH LIGHT LOAD EFFICIENCY SYNCHRONOUS BUCK REGULATOR WITH PULSE SKIPPING CONTROL	United States	7245113	17-Jul-2007	Granted
DROOP AMPLIFIER CIRCUIT	United States	7064528	20-Jun-2006	Granted
BATTERY AUTHENTICATION SYSTEM	United States	7596699	29-Sep-2009	Granted
COMMON-MODE CURRENT FEEDBACK AMPLIFIERS	United States	7132859	07-Nov-2006	Granted
CONFIGURABLE INTERNAL/EXTERNAL LINEAR VOLTAGE REGULATOR	United States	7612546	03-Nov-2009	Granted
APPARATUS FOR OFFSET CORRECTING HIGH-SIDE AND LOW-SIDE SINKING/SOURCING OVER-CURRENT PROTECTION	United States	7227731	05-Jun-2007	Granted
FREQUENCY PROGRAMMABLE FEED-FORWARD OSCILLATOR AND TRIANGLE WAVE GENERATOR	United States	7256623	14-Aug-2007	Granted
STARTUP VIA FB PIN REGULATION	United States	7088600	08-Aug-2006	Granted
ENHANCED PLASMA ETCH PROCESS	United States	7181306	20-Feb-2007	Granted
SPEECH AMPLIFIER-RESIDENT MECHANISM FOR CONTROLLABLY SUPPLYING POWER TO A LINE CIRCUIT	United States	7103178	05-Sep-2006	Granted
CMOS-CONFIGURED TRANSCONDUCTANCE AMPLIFIER CIRCUIT	United States	7075370	11-Jul-2006	Granted
ENABLE AND DISABLE OF DIODE-EMULATION IN A DC/DC CONVERTER	United States	7205751	17-May-2007	Granted
TWO-WIRE CHIP-TO-CHIP INTERFACE	United States	7430259	30-Sep-2008	Granted
SYSTEM AND METHOD FOR MONITORING A CHARGING PERIOD IN A BATTERY CHARGER	United States	7205747	17-Apr-2007	Granted
CONTROLLER AND DRIVER ARCHITECTURE FOR DOUBLE- ENDED	United States	7075247	11-Jul-2006	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
CIRCUITRY FOR POWERING COLD CATHODE FLUORESCENT LAMPS				
STAGGERING SWITCHING SIGNALS FOR MULTIPLE COLD CATHODES FLUORESCENT LAMP BACKLIGHTING SYSTEM TO REDUCE ELECTRONAGNETIC INTERFERENCE	United States	7141941	28-Nov-2006	Granted
INTEGRATED BATTERY CHARGER AND SYSTEM REGULATOR CIRCUIT	United States	7489109	10-Feb-2009	Granted
APPARATUS AND METHOD FOR SLIDING-MODE CONTROL IN A MULTIPHASE SWITCHING POWER SUPPLY	United States	7282896	16-Oct-2007	Granted
APPARATUS AND METHOD FOR FIXED-FREQUENCY CONTROL IN A SWITCHING POWER SUPPLY	United States	7091708	15-Aug-2006	Granted
APPARATUS AND METHOD FOR FIXED-FREQUENCY CONTROL IN A SWITCHING POWER SUPPLY	United States	7230407	12-Jun-2007	Granted
APPARATUS AND METHOD FOR TRANSIENT CONTROL IN A MULTIPHASE SWITCHING POWER SUPPLY	United States	7282897	16-Oct-2007	Granted
METHOD FOR FORMING PLASMA ENHANCED DEPOSITED, FULLY OXIDIZED PSG FILM	United States	7223706	29-May-2007	Granted
POWER SUPPLY CIRCUIT CONTAINING MULTIPLE DC-DC CONVERTERS HAVING PROGRAMMABLE OUTPUT CURRENT CAPABILITIES	United States	7345378	18-Mar-2008	Granted
POWER SUPPLY CIRCUIT CONTAINING MULTIPLE DC-DC CONVERTERS HAVING PROGRAMMABLE OUTPUT CURRENT CAPABILITIES	United States	7612465	03-Nov-2009	Granted
TEMPERATURE COMPENSATION FOR FLOATING GATE CIRCUITS	United States	7429888	30-Sep-2008	Granted
APPARATUS AND METHOD FOR STATE-VARIABLE SYNTHESIS IN A SWITCHING POWER SUPPLY	United States	7248024	24-Jul-2007	Granted
FAULT SIGNATURE SYSTEM FOR POWER MANAGEMENT INTEGRATED CIRCUITS	United States	7420791	02-Sep-2008	Granted
OVER VOLTAGE AND OVER CURRENT PROTECTION INTEGRATED CIRCUIT	United States	7394223	01-Jul-2008	Granted

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METHOD TO PREVENT BOOSTING SYSTEM BUS WHEN CHARGING THE BATTERY	United States	7235955	26-Jun-2007	Granted
PHASE SHIFT MODULATION-BASED CONTROL OF AMPLITUDE OF AC VOLTAGE OUTPUT PRODUCED BY DOUBLE-ENDED DC-AC CONVERTER CIRCUITRY FOR POWERING HIGH VOLTAGE LOAD SUCH AS COLD CATHODE FLUORESCENT LAMP	United States	7368880	06-May-2008	Granted
HIGH ACCURACY DIGITAL TO ANALOG CONVERTER USING A PARALLEL P/N TYPE R-2R RESISTOR LADDER	United States	6975261	13-Dec-2005	Granted
CURRENT AVERAGING CIRCUIT FOR A PWM POWER CONVERTER	United States	7196503	27-Mar-2007	Granted
ARCHITECTURE FOR ACHIEVING RESONANT CIRCUIT SYNCHRONIZATION OF MULTIPLE ZERO VOLTAGE SWITCHED PUSH-PULL DC-AC CONVERTERS	United States	7054176	30-May-2006	Granted
PRECISION FLOATING GATE REFERENCE TEMPERATURE COEFFICIENT COMPENSATION METHOD	United States	7221209	22-May-2007	Granted
ACTIVE POWER SUPPLY REJECTION USING NEGATIVE CURRENT GENERATION LOOP FEEDBACK	United States	7239195	03-Jul-2007	Granted
TRUE DIFFERENTIAL MICROPHONE AMPLIFIER	United States	7259627	21-Aug-2007	Granted
PHASE-ERROR CORRECTION CIRCUIT FOR A HIGH SPEED FREQUENCY SYNTHESIZER	United States	7205798	17-Apr-2007	Granted
PHASE-ERROR CORRECTION CIRCUIT FOR A HIGH SPEED FREQUENCY SYNTHESIZER	United States	7498852	03-Mar-2009	Granted
ON-CHIP EE-PROM PROGRAMMING WAVEFORM GENERATION	United States	7158412	02-Jan-2007	Granted
ON-CHIP EE-PROM PROGRAMMING WAVEFORM GENERATION	United States	7502264	10-Mar-2009	Granted
DIGITALLY SYNCHRONIZED INTEGRATOR FOR NOISE REJECTION IN SYSTEM USING PWM DIMMING SIGNALS TO CONTROL BRIGHTNESS OF	United States	7528818	05-May-2009	Granted

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LIGHT SOURCE				
GROUND SKIMMING OUTPUT STAGE	United States	7459978	02-Dec-2008	Granted
FLEXIBLE MULTI-PULSE GENERATOR	United States	7492686	17-Feb-2009	Granted
SEMI-CLOCKLESS, CASCADED, CURRENT-MODE POWER REGULATOR HAVING HIGH NOISE IMMUNITY AND ARBITRARY PHASE COUNT	United States	7215102	08-May-2007	Granted
SYSTEMS AND METHODS FOR REDUCING HARMONICS PRODUCED BY OSCILLATORS	United States	7386023	10-Jun-2008	Granted
FLOATING GATE ANALOG VOLTAGE LEVEL SHIFT CIRCUIT AND METHOD FOR PRODUCING A VOLTAGE REFERENCE THAT OPERATES ON A LOW SUPPLY VOLTAGE	United States	7113017	26-Sep-2006	Granted
FLOATING GATE ANALOG VOLTAGE LEVEL SHIFT CIRCUIT AND METHOD FOR PRODUCING A VOLTAGE REFERENCE THAT OPERATES ON A LOW SUPPLY VOLTAGE	United States	7345522	18-Mar-2008	Granted
FLOATING GATE ANALOG VOLTAGE LEVEL SHIFT CIRCUIT AND METHOD FOR PRODUCING A VOLTAGE REFERENCE THAT OPERATES ON A LOW SUPPLY VOLTAGE	United States	7345523	18-Mar-2008	Granted
ACTIVATING A PHASE IN A MULTIPHASE DC/DC CONVERTER WITHOUT DISTURBING THE OUTPUT VOLTAGE	United States	7023182	04-Apr-2006	Granted
REMOVING A PHASE IN A MULTIPHASE DC/DC CONVERTER WITHOUT DISTURBING THE OUTPUT VOLTAGE	United States	7161332	09-Jan-2007	Granted
CURRENT FEEDBACK AMPLIFIERS	United States	7132860	07-Nov-2006	Granted
CURRENT FEEDBACK AMPLIFIERS	United States	7250791	31-Jul-2007	Granted
CURRENT FEEDBACK AMPLIFIERS	United States	7358777	15-Apr-2008	Granted
CURRENT FEEDBACK AMPLIFIERS WITH SEPARATE COMMON-MODE AND DIFFERENTIAL MODE-INPUTS	United States	7116132	03-Oct-2006	Granted
VOLTAGE TRACKING REFERENCE FOR A POWER REGULATOR	United States	7453251	18-Nov-2008	Granted

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CONSTANT FREQUENCY DUTY CYCLE INDEPENDENT SYNTHETIC RIPPLE REGULATOR	United States	7145317	05-Dec- 2006	Granted
BONDWIRE UTILIZED FOR COULOMB COUNTING AND SAFETY CIRCUITS	United States	7332814	19-Feb- 2008	Granted
BONDWIRE UTILIZED FOR COULOMB COUNTING AND SAFETY CIRCUITS	United States	7550806	23-Jun- 2009	Granted
INTEGRATED PROCESS FOR THIN FILM RESISTORS WITH SILICIDES	United States	7341958	11-Mar- 2008	Granted
INTEGRATED PROCESS FOR THIN FILM RESISTORS WITH SILICIDES	United States	7662692	16-Feb- 2010	Granted
ELECTROSTATIC DISCHARGE PROTECTION DEVICE FOR CMOS CIRCUITS AND FOR APPLICATIONS WITH INPUT/OUTPUT VOLTAGE OUTSIDE THE RANGE OF THE CORE CIRCUIT POWER SUPPLY	United States	7285828	23-Oct- 2007	Granted
ELECTROSTATIC DISCHARGE PROTECTION DEVICE FOR CMOS CIRCUITS AND FOR APPLICATIONS WITH INPUT/OUTPUT VOLTAGE OUTSIDE THE RANGE OF THE CORE CIRCUIT POWER SUPPLY	United States	7479414	20-Jan-2009	Granted
DC-AC CONVERTER HAVING PHASE- MODULATED, DOUBLE-ENDED, HALF- BRIDGE TOPOLOGY FOR POWERING HIGH VOLTAGE LOAD SUCH AS COLD CATHODE FLUORESCENT LAMP	United States	7560872	14-Jul-2009	Granted
IMPROVED LINEAR REGULATOR	United States	7196501	27-Mar- 2007	Granted
REFERENCE VOLTAGE GENERATOR FOR USE IN DISPLAY APPLICATIONS	United States	7193551	20-Mar- 2007	Granted
REFERENCE VOLTAGE GENERATOR FOR USE IN DISPLAY APPLICATIONS	United States	7385544	10-Jun- 2008	Granted
DC-AC CONVERTER HAVING PHASE- MODULATED, DOUBLE-ENDED, FULL- BRIDGE TOPOLOGY FOR POWERING HIGH VOLTAGE LOAD SUCH AS COLD CATHODE FLUORESCENT LAMP	United States	7564193	21-Jul-2009	Granted
PWM CONTROLLER WITH DUAL-EDGE MODULATION USING DUAL RAMPS	United States	7453250	18-Nov- 2008	Granted
PFM-PWM DC-DC CONVERTER PROVIDING DC OFFSET CORRECTION TO PWM ERROR AMPLIFIER AND	United States	7382114	03-Jun- 2008	Granted

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EQUALIZING REGULATED VOLTAGE CONDITIONS WHEN TRANSITIONING BETWEEN PFM AND PWM MODES				
BIDIRECTIONAL BUFFERED INTERFACE FOR CROSSPOINT SWITCH	United States	7492826	17-Feb-2009	Granted
BIPOLAR STRUCTURES HAVING IMPROVED BVCEO/Rcs TRADE OFF MADE WITH DEPLETABLE COLLECTOR COLUMNS	United States	7285469	23-Oct-2007	Granted
BIPOLAR STRUCTURES HAVING IMPROVED BVCEO/Rcs TRADE OFF MADE WITH DEPLETABLE COLLECTOR COLUMNS	United States	7473983	06-Jan-2009	Granted
SELF-CALIBRATING TIMING CIRCUITS FOR USE IN A SYNC SEPARATOR	United States	7423694	09-Sep-2008	Granted
MODIFICATION CONSTANT-ON CONTROL SCHEME ON ZERO ESR OUTPUT CAPACITOR OPERATION CONDITION	United States	7439721	21-Oct-2008	Granted
PMOS DEPLETABLE DRAIN EXTENSION MADE FROM NMOS DUAL DEPLETABLE DRAIN EXTENSIONS	United States	7547592	16-Jun-2009	Granted
DEPLETABLE CATHODE LOW CHARGE STORAGE DIODE	United States	7385246	10-Jun-2008	Granted
DEVICES WITH ADJUSTABLE DUAL-POLARITY TRIGGER AND HOLDING-VOLTAGE/CURRENT FOR HIGH LEVEL OF ELECTROSTATIC DISCHARGE PROTECTION IN SUB-MICRON MIXED SIGNAL CMOS/BICMOS INTEGRATED CIRCUITS	United States	7566914	28-Jul-2009	Granted
GATE DRIVER TOPOLOGY FOR MAXIMUM LOAD EFFICIENCY	United States	7615940	10-Nov-2009	Granted
CIRCUIT FOR MULTIPLEXING DIGITAL AND ANALOG INFORMATION VIA SINGLE PIN OF DRIVER FOR SWITCHED MOSFETS OF DC-DC CONVERTER	United States	7504816	17-Mar-2009	Granted
VOLTAGE REGULATOR WITH SYNCHRONIZED PHASE SHIFT	United States	7368959	06-May-2008	Granted
CIRCUIT FOR GENERATING PRECISION SOFT-START FREQUENCY FOR EITHER VALUE OF ADDRESS BIT APPLIED TO EXTERNAL RESET PIN	United States	7514992	07-Apr-2009	Granted
COMPENSATION OFFSET ADJUSTMENT	United States	7489121	10-Feb-	Granted

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SCHEME FOR FAST REFERENCE VOLTAGE TRANSITIONING			2009	
ADAPTIVE PWM PULSE POSITION FOR FAST TRANSIENT RESPONSE	United States	7453246	18-Nov- 2008	Granted
USAGE OF A BUILD CODE TO SPECIFY LAYOUT CHARACTERISTICS	United States	7461366	02-Dec- 2008	Granted
SLOW TAIL COMPENSATION	United States	7180048	20-Feb- 2007	Granted
SLOW TAIL COMPENSATION	United States	7423252	09-Sep- 2008	Granted
METHOD AND APPLICATION FOR SWITCHING AUDIO AND DATA SIGNALS THROUGH A SINGLE TERMINAL	United States	7482853	27-Jan-2009	Granted
MULTI-PHASE DC-DC CONVERTER USING AUXILIARY RESISTOR NETWORK TO FEED BACK MULTIPLE SINGLE- ENDED SENSED CURRENTS TO SUPERVISORY CONTROLLER FOR BALANCED CURRENT-SHARING AMONG PLURAL CHANNELS	United States	7339361	04-Mar- 2008	Granted
MULTI-PHASE DC-DC CONVERTER USING AUXILIARY RESISTOR NETWORK TO FEED BACK MULTIPLE SINGLE- ENDED SENSED CURRENTS TO SUPERVISORY CONTROLLER FOR BALANCED CURRENT-SHARING AMONG PLURAL CHANNELS	United States	7589511	15-Sep- 2009	Granted
AMPLIFIER WITH IMPROVED COMPENSATION TOPOLOGY AND RELATED AMPLIFIER CIRCUIT, SYSTEM, AND METHOD	United States	7528655	05-May- 2009	Granted
SWITCHED GATE CURRENT DRIVER	United States	7609734	27-Oct- 2009	Granted
HIGH VOLTAGE COMPARATOR USING SLIDING INPUT LOW VOLTAGE DEVICES	United States	7528634	05-May- 2009	Granted
A MULTIPLE TIME PROGRAMMABLE (MTP) PMOS FLOATING-GATE-BASED NON-VOLATILE ELEMENT FOR A GENERAL-PURPOSE CMOS TECHNOLOGY WITH THICK GATE OXIDE	United States	7542342	02-Jun- 2009	Granted
TWO PIN-BASED SENSING OF REMOTE	United States	7345465	18-Mar-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
DC SUPPLY VOLTAGE DIFFERENTIAL USING PRECISION OPERATIONAL AMPLIFIER AND DIFFUSED RESISTORS			2008	
TWO PIN-BASED SENSING OF REMOTE DC SUPPLY VOLTAGE DIFFERENTIAL USING PRECISION OPERATIONAL AMPLIFIER AND DIFFUSED RESISTORS	United States	7541797	02-Jun- 2009	Granted
AUXILIARY TURN-ON MECHANISM FOR REDUCING CONDUCTION LOSS IN BODY-DIODE OF LOW SIDE MOSFET OF COUPLED-INDUCTOR DC-DC CONVERTER	United States	7443146	28-Oct- 2008	Granted
VOLTAGE REGULATOR HAVING CURRENT CANCELING COMPENSATION	United States	7535211	19-May- 2009	Granted
PHOTODIODE FOR MULTIPLE WAVELENGTH OPERATION	United States	7485486	03-Feb- 2009	Granted
A CMOS TEMPERATURE-TO-DIGITAL CONVERTER WITH DIGITAL CORRECTION	United States	7686508	30-Mar- 2010	Granted
MODULATOR CIRCUIT WITH LINEAR AND NON-LINEAR CONTROL	United States	7471133	30-Dec- 2008	Granted
SELF PROTECTING OUTPUT STAGE	United States	7511931	31-Mar- 2009	Granted
NEGATIVE CAPACITANCE SYNTHESIS	United States	7609111	27-Oct- 2009	Granted
ADAPTIVE FIRING ORDER CONTROL FOR DYNAMIC CURRENT BALANCE OF MULTIPHASE VOLTAGE REGULATORS	United States	7592787	23-Sep- 2009	Granted
USE OF SERIAL CONTROLLER TO PROGRAM A LDD, PMIC AND PDIC	United States	7546397	09-Jun- 2009	Granted
AUTOMATIC CIRCUIT AND METHOD FOR TEMPERATURE COMPENSATION OF OSCILLATOR FREQUENCY VARIATION OVER TEMPERATURE FOR A REAL TIME CLOCK CHIP	United States	7371005	13-May- 2008	Granted
METHOD FOR USING DIGITAL PLL IN A VOLTAGE REGULATOR	United States	7592846	22-Sep- 2009	Granted
SWITCHING FREQUENCY CONTROL OF SWITCHED CAPACITOR CIRCUIT USING OUTPUT VOLTAGE DROOP	United States	7612603	03-Nov- 2009	Granted
CONFIGURABLE PHOTO DETECTOR CIRCUIT	United States	7635836	22-Dec- 2009	Granted
DYNAMICALLY CONFIGURABLE MULTIPLE WAVELENGTH	United States	7663087	16-Feb- 2010	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
PHOTODETECTOR ARRAY FOR OPTICAL STORAGE APPLICATIONS				
FLASH MEMORY ARRAY OF FLOATING GATE-BASED NON-VOLATILE MEMORY CELLS	United States	7688627	30-Mar-2010	Granted
INPUT SAMPLING NETWORK THAT AVOIDS UNDESIRED TRANSIENT VOLTAGES	United States	7671776	02-Mar-2010	Granted
RF-COUPLED DIGITAL ISOLATOR	United States	7468547	23-Dec-2008	Granted
SLEW-ENHANCED INPUT STAGES AND AMPLIFIERS	United States	7557659	07-Jul-2009	Granted
TUNABLE VOLTAGE ISOLATION GROUND TO GROUND ESD CLAMP	United States	7663190	16-Feb-2010	Granted
BI-DIRECTIONAL BUFFER WITH LEVEL SHIFTING	United States	7692450	06-Apr-2010	Granted
BI-DIRECTIONAL BUFFER AND METHOD FOR BI-DIRECTIONAL BUFFERING THAT REDUCE GLITCHES DUE TO FEEDBACK	United States	7639045	29-Dec-2009	Granted
HIGH VOLTAGE LATERAL MOS STRUCTURE WITH DEPLETED TOP GATE REGION	United States	5264719	23-Nov-1993	Granted
PROCESS FOR FORMING TWIN WELL CMOS INTEGRATED CIRCUITS	United States	5247199	21-Sep-1993	Granted
HIGH FREQUENCY ANALOG TRANSISTORS, METHOD OF FABRICATION AND CIRCUIT IMPLEMENTATION	United States	5668397	16-Sep-1997	Granted
HIGH FREQUENCY ANALOG TRANSISTORS, METHOD OF FABRICATION AND CIRCUIT IMPLEMENTATION	United States	5807780	15-Sep-1998	Granted
HIGH FREQUENCY ANALOG TRANSISTORS, METHOD OF FABRICATION AND CIRCUIT IMPLEMENTATION	United States	5892264	06-Apr-1999	Granted
SELF-CALIBRATING TIMING CIRCUITS FOR USE IN A SYNC SEPARATOR	United States	7633552	24-Nov-2009	Granted
NOISE CANCELLATION FOR GPS ANTENNA MODULE	United States	12/544860	20-Aug-2009	Pending
SYNTHETIC RIPPLE REGULATOR	United States	12/255346	21-Oct-2008	Pending
REFERENCE VOLTAGE GENERATOR FOR USE IN DISPLAY APPLICATIONS	United States	11/344899	01-Feb-2006	Pending
AUXILIARY TURN-ON MECHANISM FOR	United States	12/651985	04-Jan-2010	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
REDUCING CONDUCTION LOSS IN BODY-DIODE OF LOW SIDE MOSFET OF COUPLED-INDUCTOR DC-DC CONVERTER				
SYSTEM AND METHOD FOR BOOST-BUCK TRANSITION	United States	12/611668	03-Nov-2009	Published
UNIQUE CABLE EQUALIZATION ARCHITECTURE	United States	12/582659	20-Oct-2009	Pending
ADAPTIVE PWM PULSE POSITION FOR FAST TRANSIENT RESPONSE	United States	12/273441	18-Nov-2008	Published
SOLAR CELL WITH INTEGRATED SWITCH AND CONNECTION METHOD	United States	12/470351	08-Jan-2010	Pending
DYNAMICALLY ADJUSTABLE LOW NOISE, LOW POWER INSTRUMENTATION AMPLIFIER	United States	12/719792	08-Mar-2010	Pending
ACTIVE AREA BONDING COMPATIBLE HIGH CURRENT STRUCTURES	United States	11/737392	19-Apr-2007	Published
ACTIVE AREA BONDING COMPATIBLE HIGH CURRENT STRUCTURES	United States	11/737395	19-Apr-2007	Pending
GROUND SKIMMING OUTPUT STAGE	United States	12/325448	01-Dec-2008	Published
CURRENT FEEDBACK AMPLIFIERS	United States	12/037586	26-Feb-2008	Pending
INTEGRATED PROCESS FOR THIN FILM RESISTORS WITH SILICIDES	United States	12/689376	19-Jan-2010	Pending
REFERENCE VOLTAGE GENERATOR FOR USE IN DISPLAY APPLICATIONS	United States	11/540698	29-Sep-2006	Published
MODIFICATION CONSTANT-ON CONTROL SCHEME ON ZERO ESR OUTPUT CAPACITOR OPERATION CONDITION	United States	12/254525	20-Oct-2008	Published
DEPLETABLE CATHODE LOW CHARGE STORAGE DIODE	United States	12/115760	06-May-2008	Pending
CIRCUIT FOR MULTIPLEXING DIGITAL AND ANALOG INFORMATION VIA SINGLE PIN OF DRIVER FOR SWITCHED MOSFETS OF DC-DC CONVERTER	United States	12/402302	11-Mar-2009	Published
A MULTIPLE TIME PROGRAMMABLE (MTP) PMOS FLOATING-GATE-BASED NON-VOLATILE ELEMENT FOR A GENERAL-PURPOSE CMOS TECHNOLOGY WITH THICK GATE OXIDE	United States	12/430007	24-Apr-2009	Pending
DC-DC CONVERTERS HAVING IMPROVED CURRENT SENSING AND RELATED METHODS	United States	12/409239	23-Mar-2009	Published
METHOD OF TRICKLE CHARGING A BATTERY IN A NARROW RAIL ARCHITECTURE	United States	12/423842	15-Apr-2009	Pending
SYSTEM AND METHOD FOR PROGRAMMING AND CONTROLLING OVER CURRENT TRIP POINT LIMITS IN VOLTAGE REGULATORS	United States	12/564466	22-Sep-2009	Published

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
DYNAMICALLY CONFIGURABLE MULTIPLE WAVELENGTH PHOTODETECTOR ARRAY FOR OPTICAL STORAGE APPLICATIONS	United States	12/687084	13-Jan-2010	Pending
RF-COUPLED DIGITAL ISOLATOR	United States	12/163256	27-Jun-2008	Published
NPN BASE FOR IMPROVED PERFORMANCE	United States	10/944234	17-Sep-2004	Published
SYSTEM AND METHOD FOR DECAPSULATING AN ENCAPSULATED OBJECT	United States	11/875904	20-Oct-2007	Pending
OVER VOLTAGE AND OVER CURRENT PROTECTION INTEGRATED CIRCUIT	United States	12/127283	28-May-2008	Published
DIGITALLY SYNCHRONIZED INTEGRATOR FOR NOISE REJECTION IN SYSTEM USING PWM DIMMING SIGNALS TO CONTROL BRIGHTNESS OF LIGHT SOURCE	United States	12/409238	23-Mar-2009	Published
PMOS DEPLETABLE DRAIN EXTENSION MADE FROM NMOS DUAL DEPLETABLE DRAIN EXTENSIONS	United States	12/372172	17-Feb-2009	Pending
DEVICES WITH ADJUSTABLE DUAL-POLARITY TRIGGER AND HOLDING-VOLTAGE/CURRENT FOR HIGH LEVEL OF ELECTROSTATIC DISCHARGE PROTECTION IN SUB-MICRON MIXED SIGNAL CMOS/BICMOS INTEGRATED CIRCUITS	United States	12/420264	08-Apr-2009	Pending
GATE DRIVER TOPOLOGY FOR MAXIMUM LOAD EFFICIENCY	United States	12/563468	21-Sep-2009	Published
NO-WARP LEAD FRAME	United States	12/712170	24-Feb-2010	Pending
IMPLEMENTING CIRCUIT WITH TRANSISTORS HAVING LOWER BREAKDOWN VOLTAGE THAN OPERATING VOLTAGE CIRCUIT	United States	11/876084	22-Oct-2007	Pending
PHOTODIODE FOR MULTIPLE WAVELENGTH OPERATION	United States	12/365141	03-Feb-2009	Pending
A CMOS TEMPERATURE-TO-DIGITAL CONVERTER WITH DIGITAL CORRECTION	United States	12/560751	16-Sep-2009	Published
NEGATIVE CAPACITANCE SYNTHESIS	United States	12/475409	29-May-2009	Pending
LIGHT SENSORS WITH INFRARED SUPPRESSION	United States	11/950325	04-Dec-2007	Published
FLASH MEMORY ARRAY OF FLOATING GATE-BASED NON-VOLATILE MEMORY CELLS	United States	12/711520	24-Feb-2010	Pending
TUNABLE VOLTAGE ISOLATION GROUND TO GROUND ESD CLAMP	United States	12/687621	14-Jan-2010	Pending
INTEGRATED CIRCUIT RESISTOR TUNING	United States	10/740288	18-Dec-2003	Pending
PSEUDO-ASYNCHRONOUS ONE WIRE BIDIRECTIONAL BUS INTERFACE	United States	10/875763	24-Jun-2004	Published
PROGRAMMABLE HYSTERESIS IMPROVEMENT	United States	10/917628	13-Aug-2004	Published
APPARATUS AND METHOD OF EMPLOYING	United States	10/927755	27-Aug-2004	Published

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
COMBINED SWITCHING AND PWM DIMMING SIGNALS TO CONTROL BRIGHTNESS OF COLD CATHODE FLUORESCENT LAMP USED TO BACKLIGHT LIQUID CRYSTAL DISPLAY				
CONSTANT-ON-TIME SWITCHING POWER SUPPLY WITH VIRTUAL RIPPLE FEEDBACK AND RELATED SYSTEM AND METHOD	United States	11/087323	22-Mar-2005	Published
SINGLE SUPPLY VIDEO LINE DRIVER	United States	11/204227	15-Aug-2005	Pending
UNIQUE SCHEME FOR DEFINING WRITE STRATEGY OPERATION	United States	11/446056	02-Jun-2006	Published
IMPROVED ESD STRUCTURE	United States	11/267175	07-Nov-2005	Pending
DAMPING OF PARASITIC RESONANCE USING A RESISTIVE PARALLEL CONDUCTOR	United States	11/394440	31-Mar-2006	Published
AUTOMATIC FREQUENCY COMPENSATION OF VIDEO SIGNALS TRANSMITTED ACROSS CABLES	United States	11/255360	21-Oct-2005	Published
NO-WARP LEAD FRAME	United States	11/453216	15-Jun-2006	Pending
BIDIRECTIONAL COMMUNICATION PROTOCOL BETWEEN A SERIALIZER AND A DESERIALIZER	United States	11/838064	14-Aug-2007	Pending
SPREAD SPECTRUM CLOCK GENERATOR AND METHOD	United States	11/838084	13-Aug-2007	Pending
DIFFERENTIAL DRIVER WITH COMMON-MODE VOLTAGE TRACKING AND METHOD	United States	11/838069	13-Aug-2007	Pending
IMPLEMENTING CIRCUIT WITH TRANSISTORS HAVING LOWER BREAKDOWN VOLTAGE THAN OPERATING VOLTAGE CIRCUIT	United States	11/624681	18-Jan-2007	Pending
REDUCING POWER CONSUMPTION ASSOCIATED WITH HIGH BIAS CURRENTS IN SYSTEMS THAT DRIVE OR OTHERWISE CONTROL DISPLAYS	United States	11/609853	12-Dec-2006	Published
HYSTERETIC POWER-SUPPLY CONTROLLER WITH ADJUSTABLE SWITCHING FREQUENCY, AND RELATED POWER SUPPLY, SYSTEM, AND METHOD	United States	11/897681	31-Aug-2007	Published
HYBRID LASER DRIVERS THAT INCLUDE A DECODER	United States	11/749636	16-May-2007	Published
MULTI-LEVEL LVDS DATA TRANSMISSION WITH EMBEDDED WORD CLOCK	United States	11/746610	09-May-2007	Pending
HIGH FREQUENCY CONNECTION-LESS CHARGER	United States	11/736897	18-Apr-2007	Published
METHOD AND APPARATUS FOR SHIELDING TUNNELING CIRCUIT AND FLOATING GATE FOR INTEGRATION OF A FLOATING GATE VOLTAGE REFERENCE IN A GENERAL PURPOSE CMOS TECHNOLOGY	United States	11/639658	14-Dec-2006	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
COUPLED-INDUCTOR FOR SWITCHING POWER SUPPLY	United States	11/903185	19-Sep-2007	Published
HYSTERETIC MODE CONTROLER FOR CAPACITOR VOLTAGE DIVIDER	United States	11/748450	05-Jun-2007	Published
METHOD OF TRICKLE CHARGING A BATTERY IN A NARROW RAIL ARCHITECTURE	United States	11/696990	05-Apr-2007	Published
SIGMA DELTA CONVERTER SYSTEM AND METHOD	United States	11/999256	03-Dec-2007	Published
LIGHT SENSORS WITH INFRARED SUPPRESSION	United States	11/621443	09-Jan-2007	Published
METHOD AND APPARATUS FOR EFFICIENT TRANSITIONING BETWEEN DIFFERENT OPERATING MODES OF A REGULATOR	United States	11/869070	09-Oct-2007	Pending
SYSTEM AND METHOD TO CALCULATE INITIAL DUTY CYCLE	United States	11/955212	12-Dec-2007	Published
METHOD TO CALCULATE INITIAL DUTY CYCLE				
SYSTEM AND METHOD OF CHARGING A BATTERY AND POWER DELIVERY USING AN ADAPTER AND CAPACITOR VOLTAGE DIVIDER CIRCUIT	United States	11/738549	23-Apr-2007	Pending
CRADLE CHARGER CONTROLLER WITH BELOW GROUND LEVEL BIASING	United States	11/856513	17-Sep-2007	Published
CONSTANT CURRENT LIGHT EMITTING DIODE (LED) DRIVER CIRCUIT AND METHOD	United States	12/002611	17-Dec-2007	Pending
POWER-SUPPLY CONTROL	United States	12/006726	04-Jan-2008	Pending
AMBIENT LIGHT SENSOR USING CONVENTIONAL CMOS IMAGE SENSOR PROCESS	United States	11/686311	14-Mar-2007	Published
SYSTEM AND METHOD FOR PROGRAMMING AND CONTROLLING OVER CURRENT TRIP POINT LIMITS IN VOLTAGE REGULATORS	United States	12/032328	15-Feb-2008	Published
A BACK CURRENT LIMITING SWITCH AND RELATED BI-DIRECTIONAL CURRENT-LIMITING SWITCH	United States	12/038334	27-Feb-2008	Published
POWER SUPPLY WITH A MAGNETICALLY UNCOUPLED PHASE AND AN ODD NUMBER OF MAGNETICALLY COUPLED PHASES, AND CONTROL FOR A POWER SUPPLY WITH MAGNETICALLY COUPLED AND MAGNETICALLY UNCOUPLED PHASES	United States	12/136014	09-Jun-2008	Published
MULTI-MODULE CURRENT SHARING	United States	11/775306	10-Jul-2007	Published

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SCHEME				
EOS ROBUST BIPOLAR TRANSIENT CLAMP	United States	11/855829	14-Sep-2007	Pending
MEMORY ARRAY OF FLOATING GATE-BASED NON-VOLATILE MEMORY CELLS	United States	11/861111	25-Sep-2007	Published
IMPROVED BURIED ISOLATION LAYER	United States	11/877166	23-Oct-2007	Pending
METHOD OF FORMING THE NDMOS DEVICE BODY WITH THE REDUCED NUMBER OF MASKS	United States	11/870794	11-Oct-2007	Published
INTEGRATED CIRCUIT WITH A SUBSURFACE DIODE	United States	12/037569	26-Feb-2008	Published
BALASTED POLYCRYSTALLINE FUSE	United States	11/963236	21-Dec-2007	Pending
METHOD FOR DETERMINATION OF INPUT CURRENT INTO A SWITCHING REGULATOR EXCLUSIVE OF A DEDICATED SENSE ELEMENT	United States	12/080263	31-Mar-2008	Published
CONTROLLER AND DRIVER COMMUNICATION FOR SWITCHING REGULATORS	United States	11/935535	06-Nov-2007	Pending
CONTROLLER HAVING COMP NODE VOLTAGE SHIFT CANCELLATION FOR IMPROVED DISCONTINUOUS CONDUCTION MODE (DCM) REGULATOR PERFORMANCE AND RELATED METHODS	United States	11/879074	16-Jul-2007	Pending
DYNAMIC CONVERTER TOPOLOGY	United States	12/105731	18-Apr-2008	Pending
DYNAMIC CONVERTER TOPOLOGY	United States	12/148787	21-Apr-2008	Pending
HIGHLY LINEAR BOOTSTRAPPED SWITCH WITH IMPROVED RELIABILITY	United States	12/141027	17-Jun-2008	Pending
PULSE-ADDING SCHEME FOR SMOOTH PHASE DROPPING AT LIGHT LOAD CONDITION	United States	11/954888	12-Dec-2007	Published
JUNCTION BARRIER SCHOTTKY DIODE	United States	12/107177	22-Apr-2008	Pending
HYBRID LASER DIODE DRIVERS THAT INCLUDE A STATE MACHINE	United States	11/749703	16-May-2007	Published
CIRCUITS AND METHODS TO PRODUCE A VPTAT AND/OR A BANDGAP VOLTAGE	United States	12/111796	29-Apr-2008	Published
DEACTIVATING PARALLEL MOSFETS TO IMPROVE LIGHT LOAD EFFICIENCY	United States	12/131531	02-Jun-2008	Pending
SENSING A PHASE-PATH CURRENT IN A MULTIPHASE POWER SUPPLY SUCH AS A COUPLED-INDUCTOR POWER SUPPLY	United States	12/189112	08-Aug-2008	Published
JUNCTION BARRIER SCHOTTKY DIODE WITH DUAL SILICIDES AND METHOD OF MANUFACTURE	United States	11/849565	04-Sep-2007	Pending
STACKABLE ELECTRONIC COMPONENT	United States	12/2002985	02-Sep-2008	Published
OVER-VOLTAGE PROTECTED BATTERY CHARGER WITH BYPASS	United States	11/931969	31-Oct-2007	Published
CLOSED LOOP, STEADY STATE FREQUENCY CONTROL OF VARIABLE FREQUENCY	United States	12/046342	11-Mar-2008	Published

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SWITCHER ARCHITECTURES				
COUPLED-INDUCTOR CORE FOR UNBALANCED PHASE CURRENTS	United States	12/136018	09-Jun-2008	Published
LOAD CURRENT COMPENSATION IN SYNCHRONOUS POWER CONVERTERS	United States	12/176759	21-Jul-2008	Pending
BUCK-BOOST REGULATOR	United States	12/134800	06-Jun-2008	Pending
DEAD-TIME TRANSITION ADJUSTMENTS FOR SYNCHRONOUS POWER CONVERTERS	United States	12/176762	21-Jul-2008	Pending
VOLTAGE CONVERTER WITH COMBINED BUCK CONVERTER AND CAPACITIVE VOLTAGE DIVIDER	United States	12/178050	23-Jul-2008	Pending
ANALOG SWITCH WITH OVERCURRENT DETECTION	United States	12/235274	22-Sep-2008	Pending
THRESHOLD VOLTAGE MONITORING AND CONTROL IN SYNCHRONOUS POWER CONVERTERS	United States	12/116092	06-May-2008	Pending
LEAKAGE CURRENT CANCELLATION TECHNIQUE FOR INTEGRATED ANALOG SWITCHES	United States	12/261087	30-Oct-2008	Pending
ANALOG SWITCH ARCHITECTURE FOR OPERATION OUTSIDE OF POWER RAILS	United States	12/260721	30-Oct-2008	Pending
ARCHITECTURE FOR HIGHLY ACCURATE DCP	United States	12/242926	01-Oct-2008	Pending
INTEGRATED EFFICIENCY OPTIMIZATION LOOP FOR MULTI-PHASE BUCK VRS	United States	12/334440	12-Dec-2008	Pending
A COEFFICIENT COMPRESSION METHOD TO STORE LARGE NUMBER OF FIR COEFFICIENTS	United States		12-Sep-2008	Published
SWITCHING REGULATOR WITH BALANCED CONTROL CONFIGURATION TO ELIMINATE COMPENSATION	United States	12/324368	26-Nov-2008	Published
BANDGAP VOLTAGE REFERENCE CIRCUIT	United States	11/968551	02-Jan-2008	Published
SUB-VOLT BANDGAP VOLTAGE REFERENCE WITH BUFFERED CTAT BIAS	United States	12/350899	08-Jan-2009	Pending
MODULATOR WITH LINEAR PERIOD STRETCHING CAPABILITY	United States	12/173602	15-Jul-2008	Pending
SYSTEM AND METHOD FOR IMPROVING INDUCTOR CURRENT SENSING ACCURACY OF A DC/DC VOLTAGE REGULATOR	United States	12/329147	05-Dec-2008	Published
BI-DIRECTIONAL OPEN DRAIN BUFFER WITH REDUCED OFFSET	United States	12/060829	01-Apr-2008	Pending
PROXIMITY SENSORS AND METHODS FOR SENSING PROXIMITY	United States	12/101047	10-Apr-2008	Published
CLIP MOUNT FOR INTEGRATED CIRCUIT AND FRAMES	United States	12/250,525	13-Oct-2008	Pending
AC AND DC TEMPERATURE COMPENSATION SCHEME FOR DCR CURRENT SENSE	United States	12/339500	19-Dec-2008	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
ANALOG TO DIGITAL CONVERSION BY SYNCHRONOUS PULSE WIDTH MODULATOR/SWITCHED CAPACITOR RESISTOR FEED BACK	United States	12/378818	18-Feb-2009	Pending
POWER-SUPPLY CONTROL	United States	12/006703	04-Jan-2008	Published
SYSTEM AND METHOD FOR PROVIDING PULSE FREQUENCY MODULATION MODE	United States	12/506672	21-Jul-2009	Published
QUASI TRANSITION DIODE EMULATION	United States	12/558035	11-Sep-2009	Published
SYSTEM AND METHOD OF PROVIDING CONTROL PULSES TO CONTROL OPERATION OF A CONVERTER WITH HIGH FREQUENCY REPETITIVE LOAD TRANSIENTS	United States	12/350560	26-Jan-2009	Pending
METHOD AND SYSTEM FOR DIMMING AC-POWERED LIGHT EMITTING DIODE (LED) LIGHTING SYSTEMS USING CONVENTIONAL INCANDESCENT DIMMERS	United States	12/366642	05-Feb-2009	Published
WAVEFORM CURRENT MONITOR USING RDSON OF LOW-SIDE BRIDGE FET	United States	12/248355	09-Oct-2008	Published
HIGH-SIDE SENSING OF ZERO INDUCTOR CURRENT FOR STEP DOWN DC-DC CONVERTER	United States	12/204344	04-Sep-2008	Pending
HYBRID LASER DIODE DRIVERS	United States	12/277912	25-Nov-2008	Published
DEVICE UNDER TEST POWER SUPPLY	United States	12/408157	20-Mar-2009	Pending
VARYING OPERATION OF A VOLTAGE REGULATOR, AND COMPONENTS THEREOF, BASED UPON LOAD CONDITIONS	United States	12/192234	15-Aug-2008	Published
DYNAMIC HEADROOM CONTROL FOR LED DRIVER	United States	12/492748	26-Jun-2009	Published
POWER SUPPLY WITH A MAGNETICALLY UNCOUPLED PHASE AND AN ODD NUMBER OF MAGNETICALLY COUPLED PHASES, AND CONTROL FOR A POWER SUPPLY WITH MAGNETICALLY COUPLED AND MAGNETICALLY UNCOUPLED PHASES	United States	12/136023	09-Jun-2008	Pending
CHOPPER STABILIZED AMPLIFIER	United States	12/144384	23-Jun-2008	Published
BOOST REGULATOR USING SYNTHETIC RIPPLE REGULATION	United States	12/134910	06-Jun-2008	Pending
VOLTAGE CONVERTER WITH COMBINED CAPACITIVE VOLTAGE DIVIDER, BUCK CONVERTER AND BATTERY CHARGER	United States	12/178223	23-Jul-2008	Pending
POWER-SUPPLY CONTROLLER WITH DIFFERENT STEADY STATE AND TRANSIENT RESPONSE CHARACTERISTICS	United States	12/498287	06-Jul-2009	Pending
DUAL USE OF TIMING CAPACITOR FOR INTEGRATOR FUNCTION	United States	12/430172	27-Apr-2009	Published

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
BUCK BOOST FUNCTION BASED ON CAPACITOR BOOTSTRAP INPUT BUCK CONVERTER	United States	12/480823	09-Jun-2009	Published
ADAPTIVE CURRENT LIMIT FOR USB CHARGER APPLICATIONS	United States	12/428741	23-Apr-2009	Pending
BUCK REGULATOR INPUT CURRENT CALCULATOR	United States	12/550081	28-Aug-2009	Published
ADVANCED PHASE NUMBER CONTROL FOR IMPROVED EFFICIENCY AND FAST TRANSIENT RESPONSE IN MULTIPHASE CONVERTER APPLICATIONS	United States	12/501204	10-Jul-2009	Published
STACKED FETS FOR A POWER CONVERTER	United States	12/424666	16-Apr-2009	Pending
A SINGLE EXTERNAL RESISTOR OUTPUT IMPEDANCE CONTROL CIRCUIT FOR PROVIDING CONSTANT OUTPUT IMPEDANCE FOR MULTIPLE DRIVERS OF A CHIP OPERATING AT DIFFERENT SUPPLY VOLTAGES	United States	12/419869	07-Apr-2009	Pending
BUCK CONTROLLER INTEGRATED WITH BOOST CONTROL AND DRIVER	United States	12/482818	11-Jun-2009	Published
SYSTEM AND METHOD FOR REDUCING VOLTAGE OVERSHOOT DURING LOAD RELEASE WITHIN A BUCK REGULATOR	United States	12/506722	21-Jul-2009	Published
CURRENT SENSE CASCODE AMPLIFIER	United States	12624704	24-Nov-2009	Pending
RADIATION HARDENED DEVICE	United States	12/372893	18-Feb-2009	Published
IMPROVED DUAL RAMP MODULATOR	United States	12/492397	26-Jun-2009	Pending
PWM CLOCK GENERATION SYSTEM AND METHOD TO IMPROVE TRANSIENT RESPONSE OF A VOLTAGE REGULATOR	United States	12/490752	24-Jun-2009	Published
CONSTANT LOOP GAIN CONTROL FOR BUCK REGULATOR/MODULE	United States	12/539035	11-Aug-2009	Pending
ADVANCED SLOPE INJECTION FOR INPUT CURRENT LIMITING OF SWITCH-MODE DC/DC CONVERTER	United States	12/428739	23-Apr-2009	Published
CHARGER IC WITH BUILT-IN USB DETECTION	United States	12/423056	14-Apr-2009	Published
VOTER TESTER FOR REDUNDANT SYSTEMS	United States	12/604292	22-Oct-2009	Pending
SYSTEM AND METHOD FOR BOOST-BUCK TRANSITION	United States	12/429241	24-Apr-2009	Published
PHASE SWAPPER SCHEME FOR IMPROVED PHASE CURRENT BALANCE IN PHASE DOUBLER	United States	12/429238	24-Apr-2009	Published
SWITCHABLE SOLAR CELL DEVICES	United States	12/470325	21-May-2009	Pending
CALIBRATION OF TWO-CHANNEL TIME-INTERLEAVED ANALOG-TO-DIGITAL CONVERTERS	United States	12/419599	07-Apr-2009	Pending
UNIQUE CABLE EQUALIZATION ARCHITECTURE	United States	12/412280	26-Mar-2009	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SYSTEM AND METHOD FOR PHASE DROPPING AND ADDING	United States	12/730372	24-Mar-2010	Pending
FAULT TOLERANT REDUNDANT CLOCK CIRCUIT	United States	12/620,454	17-Nov-2009	Pending
PWM VOLTAGE CONVERTER WITH TRANSIENT AND PERMANENT FAULT IMMUNITY THROUGH REDUNDANCY AND FEEDBACK ADJUSTMENT	United States	12/622278	19-Nov-2009	Pending
CO-PACKAGING APPROACH FOR POWER CONVERTERS BASED ON PLANAR DEVICES, STRUCTURE AND METHOD	United States	12/470229	21-May-2009	Pending
TESTER INTERFACE BOARD WITH REMOVABLE TEST SITES	United States	12/688903	17-Jan-2010	Pending
DYNAMIC PHASE TIMING CONTROL FOR MULTIPLE REGULATORS OR PHASES	United States	12/650772	31-Dec-2009	Pending
IMPROVED N-BIT PIN ADC READER	United States	12/631998	07-Dec-2009	Pending
ACTIVE DROOP CURRENT SHARING	United States	12/505492	19-Jul-2009	Published
ADDING AND DROPPING PHASES IN CURRENT SHARING	United States	12/505493	19-Jul-2009	Published
INTELLIGENT MANAGEMENT OF CURRENT SHARING GROUP	United States	12/505494	19-Jul-2009	Published
METHOD TO PROPERLY RAMP CURRENT SHARING RAIL	United States	12/505495	19-Jul-2009	Published
STACKED POWER CONVERTER STRUCTURE AND METHOD	United States	12/477818	03-Jun-2009	Pending
SINGLE DIE OUTPUT POWER STAGE USING TRENCH-GATE LOW-SIDE AND LDMOS HIGH-SIDE MOSFETS, STRUCTURE AND METHOD	United States	12/471911	26-May-2009	Pending
RANDOMIZATION OF SAMPLE WINDOW IN CALIBRATION OF TIME INTERLEAVED ANALOG TO DIGITAL CONVERTER	United States	12/749882	30-Mar-2010	Pending
ASYMMETRIC ZERO-VOLTAGE SWITCHING FULL-BRIDGE POWER CONVERTERS	United States	12/651433	31-Dec-2009	Pending
A CIRCUIT TO MULTIPLEX A CURRENT LIMITING INPUT TO AN OPEN-DRAIN OUTPUT	United States	12/482527	11-Jun-2009	Pending
OPTICAL SENSORS AND METHODS FOR PROVIDING OPTICAL SENSORS	United States	12/499693	08-Jul-2009	Pending
SOLAR CELL WITH INTEGRATED SWITCH AND CONNECTION METHOD	United States	12/470351	21-May-2009	Pending
UN-BUFFERED SEGMENTED R-DAC WITH SWITCH CURRENT REDUCTION	United States	12/713841	26-Feb-2010	Pending
SYSTEM AND METHOD FOR DETERMINING OUTPUT VOLTAGE LEVEL INFORMATION FROM PHASE VOLTAGE FOR SWITCHED MODE REGULATOR CONTROLLERS	United States	12/700103	04-Feb-2010	Pending
METHOD OF INTERCONNECT CHECKING	United States	12/494031	30-Jun-2009	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
AND VERIFICATION FOR MULTIPLE ESD SPECIFICATIONS				
DATA LOOK AHEAD TO REDUCE POWER CONSUMPTION	United States	12/607924	28-Oct-2009	Pending
LINEARIZING DAC FOR PICO PROJECTOR LASER DIODE DRIVERS	United States	12/607929	28-Oct-2009	Pending
LOW THERMAL RESISTANCE AND ROBUST CHIP-SCALE-PACKAGE (CSP), STRUCTURE AND METHOD	United States	12/612616	04-Nov-2009	Pending
TRANSIENT SUPPRESSION FOR BOOT REGULATOR	United States	12/492755	26-Jun-2009	Published
CONTROL MODE FOR ZVS CONVERTER AT RESONANT OPERATING FREQUENCIES	United States	12/651875	04-Jan-2010	Pending
A SCHEME OF PFM PWM MODE TRANSITION IN MULTIPLE PHASE BUCK CONVERTER	United States	12/603218	21-Oct-2009	Pending
USE OF THE NEGATIVE CAPACITANCE CIRCUIT WITH AN EQUALIZER	United States	12/604955	23-Oct-2009	Pending
CELL BALANCING AND CHARGING	United States	12/650775	31-Dec-2009	Pending
O-RING PHASES FOR OVERCOME THE DUTY CYCLE LIMITATION ISSUE IN MULTIPHASE BOOST CONVERTER	United States	12/651012	31-Dec-2009	Pending
OPTICAL SENSORS THAT REDUCE SPECTRAL REFLECTIONS	United States	12/499723	08-Jul-2009	Pending
SYSTEM AND METHOD FOR CONTROLLING SYNCHRONOUS SWITCH FOR A SYNCHRONOUS CONVERTER	United States	12/694594	27-Jan-2010	Pending
WAY OUT OF BALANCE (WOB) CURRENT CORRECTION FOR USE WITH A MULTI-PHASE DC-DC CONVERTER	United States	12/691438	21-Jan-2010	Pending
COMPONENT FAULT DETECTION FOR USE WITH A MULTI-PHASE DC-DC CONVERTER	United States	12/691589	21-Jan-2010	Pending
CALIBRATION OF OFFSET, GAIN AND PHASE ERRORS IN M-CHANNEL TIME-INTERLEAVED ANALOG-TO-DIGITAL CONVERTERS	United States	12691449	21-Jan-2010	Pending
PROXIMITY SENSORS WITH IMPROVED AMBIENT LIGHT REJECTION	United States	12716220	02-Mar-2010	Pending
DEPLETED TOP GATE JUNCTION FIELD EFFECT TRANSISTOR (DTG JFET)	United States	12726855	18-Mar-2010	Pending
LOW NOISE, LOW POWER INSTRUMENTATION AMPLIFIER	United States	12/627959	30-Nov-2009	Pending
SERIES/PARALLEL POWER SUPPLY SWITCHING	United States	12707103	17-Feb-2010	Pending
IMPROVED TIE-BAR CONFIGURATION FOR LEADFRAME TYPE CARRIER STRIPS CROSS-REFERENCE TO RELATED APPLICATION	United States	12/699811	03-Feb-2010	Pending
ADAPTIVE PWM CONTROL AT MULTI	United States	12/705783	15-Feb-2010	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
CHANNEL LED DRIVER IC				
ELECTROSTATIC DISCHARGE CLAMP WITH CONTROLLED HYSTERESIS INCLUDING SELECTABLE TURN ON AND TURN OFF THRESHOLD VOLTAGES	United States	12/721172	10-Mar-2010	Pending
MONOLITHIC OUTPUT STAGE WITH VERTICLE HIGH-SIDE PMOS AND VERTICLE LOW-SIDE NMOS INTERCONNECTED USING BURIED METAL, STRUCTURE AND METHOD	United States	12/717976	05-Mar-2010	Pending
INTEGRATOR FOR PROVIDING OVERSHOOT PROTECTION AND LIGHT SWITCHING MODE DURING NON-ZERO LOAD CONDITION FOR AN LED DRIVER CIRCUIT	United States	12/730960	24-Mar-2010	Pending
DIAMOND SOI WITH THIN SILICON NITRIDE LAYER	United States	12/719988	09-Mar-2010	Pending
APPARATUS AND METHODOLOGY FOR MAXIMUM POWER POINT TRACKING FOR A SOLAR PANEL	United States	12/716654	03-Mar-2010	Pending
OPTICAL SENSORS THAT REDUCE SPECTRAL REFLECTIONS	United States	12/643831	21-Dec-2009	Pending
CIRCUITS AND METHODS TO PRODUCE A BANDGAP VOLTAGE WITH LOW-DRIFT	United States	12/717052	03-Mar-2010	Pending
ROTATING GAIN RESISTORS TO PRODUCE A BANDGAP VOLTAGE WITH LOW-DRIFT	United States	12/718840	05-Mar-2010	Pending
ACCURACY IMPROVEMENT METHODOLOGY WHICH ALLOWS CHIP-BY-CHIP MEASUREMENT CORRECTION	United States	11/399547	06-Apr-2006	Published
METHOD AND SYSTEM FOR DATA TRANSMISSION AND RECOVERY	United States	11/446488	01-Jun-2006	Published
USE OF DIFFERENTIAL PAIR AS SINGLE-ENDED DATA PATHS TO TRANSPORT LOW SPEED DATA	United States	11/601070	17-Nov-2006	Pending
TECHNIQUES TO PRECHARGE THE BOOT CAP IN SWITCHING REGULATORS WITH HIGH PRE BIAS VOLTAGE	United States	12/611701	03-Nov-2009	Pending
HIGH SPEED SERDES WITH BACK CHANNEL COMMUNICATIONS: THE FREQUENCY DIVISION APPROACH	United States	61/234484	17-Aug-2009	Pending
A ROBUST 2-WIRE DAISY CHAIN COMMUNICATIONS SYSTEM	United States	61/176800	08-May-2009	Pending
RANDOMIZATION AS A TECHNIQUE TO IMPROVE GENERAL APPLICABILITY OF INTERLEAVE CALIBRATION FOR ANALOG TO DIGITAL CONVERTERS	United States	61/222381	10-Jul-2009	Pending
METHOD TO FINE ADJUST RESISTANCE OF POLYSILICON RESISTORS	United States	61/172373	24-Apr-2009	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
LONG RANGE PROXIMITY AND/OR MOTION DETECTOR WITH AMBIENT LIGHT DETECTION CAPABILITIES	United States	61/173951	29-Apr-2009	Pending
ENHANCEMENT-MODE AlGaIn/GaN HEMT WITH SELF-ALIGNED ASYMMETRIC AlGaIn GATE FIELD PLATE STRUCTURE AND METHOD	United States	61/219995	24-Jun-2009	Pending
SAMPLING METHOD FOR TIME-INTERLEAVED DATA CONVERTERS IN FREQUENCY-MULTIPLEXED COMMUNICATIONS SYSTEMS	United States	61/265168	30-Nov-2009	Pending
CALIBRATION OF OFFSET, GAIN AND PHASE ERRORS IN M-CHANNEL TIME-INTERLEAVED ANALOG-TO-DIGITAL CONVERTERS	United States	61/233571	13-Aug-2009	Pending
COMPENSATED BURST MODE CONTROL	United States	61/242753	15-Sep-2009	Pending
POWER SUPPLY WITH INRUSH CURRENT CONTROL	United States	61/227772	22-Jul-2009	Pending
POWER SUPPLY WITH INRUSH CURRENT CONTROL	United States	61/232735	10-Aug-2009	Pending
HYSTERETIC CONTROLLED BUCK-BOOST CONTROLLER	United States	61/252054	15-Oct-2009	Pending
EQUALIZING THE SMALL SIGNAL RESPONSE OF VARIABLE PHASE VOLTAGE REGULATORS	United States	61/260720	12-Nov-2009	Pending
TRIAC DIMMING INRUSH CURRENT LIMITING IN AN LED DRIVER	United States	61/230989	03-Aug-2009	Pending
IMPROVED TIE-BAR CONFIGURATION FOR LEADFRAME TYPE CARRIER STRIPS CROSS-REFERENCE TO RELATED APPLICATION	United States	61/231998	06-Aug-2009	Pending
WAFER-LEVEL COATING FOR AMBIENT LIGHT SENSOR AND PROXIMITY SENSOR	United States	61/244817	22-Sep-2009	Pending
WAFER-LEVEL COATING FOR AMBIENT LIGHT SENSOR AND PROXIMITY SENSOR	United States	61/259475	09-Nov-2009	Pending
INFRARED SUPPRESSING PHOTO-PATTERNABLE COATING FOR PHOTODETECTING SEMICONDUCTOR DIE OR GLASS APPLICATIONS	United States	61/257595	03-Nov-2009	Pending
LOW-GLITCH PRECONDITIONING CIRCUIT FOR VOLTAGE REFERENCE WITH DYNAMIC ELEMENT MATCHING	United States	61/249948	08-Oct-2009	Pending
SEEDED DIAMOND FILM METHOD/DIAMOND DAMASCENE METHOD	United States	61/286440	15-Dec-2009	Pending
SYSTEM AND METHOD FOR PROGRAMMING A TIME DELAY FOR PHASE SHIFTING IN A DC/DC CONVERTER	United States	61/249371	07-Oct-2009	Pending
POCI3 DOPED G-SOI LAYER	United States	61/291059	30-Dec-2009	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
DIAMOND HEAT SPREADER STRUCTURE	United States	61286467	15-Dec-2009	Pending
OFFLINE LINEARITY CORRECTION TECHNIQUE OR (N+M) BIT DACS	United States	61/260801	12-Nov-2009	Pending
NOISE CANCELLATION FOR GPS ANTENNA MODULE	United States	61/090872	21-Aug-2009	Pending
NON-ISOLATED SHIFTED TRANSFORMER POWER TRAIN	United States	61/243290	17-Sep-2009	Pending
NON-ISOLATED SHIFTED TRANSFORMER POWER TRAIN	United States	61/306130	19-Feb-2010	Pending
TRENCH ISOLATION USING DIAMOND REFILL	United States	61/291165	30-Dec-2009	Pending
NEGATIVE VOLTAGE DETECT AND CLAMP FOR CMOS SWITCHES	United States	61/249362	07-Oct-2009	Pending
METHOD FOR ACCURATELY MEASURING CURRENTS USING ON CHIP SENSE RESISTORS	United States	61/253904	22-Oct-2009	Pending
AUTO-COMPENSATING POWER CONVERTER	United States	61/244187	21-Sep-2009	Pending
SINGLE-CYCLE CHARGE REGULATOR FOR POWER CONVERTERS	United States	61/296694	21-Jan-2010	Pending
APPLICATION SPECIFIC POWER CONVERTERS	United States	61/298340	26-Jan-2010	Pending
METHOD TO GETTER CONTAMINATION IN BONDED SOI WAFERS USING RESIDUAL GRIND DAMAGE	United States	61/262624	19-Nov-2009	Pending
AN RS-485 RECEIVER WITH A FULL FAIL- SAFE POLARITY INVERSION FUNCTION	United States	61/250487	09-Oct-2009	Pending
DIAMOND SOI WITH THIN SILICON NITRIDE LAYER	United States	61/299702	29-Jan-2010	Pending
A SINGLE MASK ISOLATION, SINKER AND DEEP-BASE STRUCTURE AND METHOD	United States	61/261043	13-Nov-2009	Pending
SINGLE MASK THIN FILM RESISTOR INTEGRATION INTO A CMP BACKEND	United States	61/264942	30-Nov-2009	Pending
SINGLE MASK THIN FILM RESISTOR INTEGRATION INTO A CMP BACKEND	United States	61/318856	30-Mar-2010	Pending
INTEGRATED GUARDED SCHOTTKY DIODE COMPATIBLE WITH TRENCH-GATE DMOS; STRUCTURE AND METHOD	United States	61/263618	23-Nov-2009	Pending
OPEN LOOP DIMMING IN AN LED DRIVER	United States	61/257803	03-Nov-2009	Pending
HEAT CONDUCTION IDEAS FOR CHIP STACKS/3D CIRCUITS	United States	61/285325	10-Dec-2009	Pending
HEAT CONDUCTION IDEAS FOR CHIP STACKS/3D CIRCUITS	United States	61/295292	15-Jan-2010	Pending
POWER SUPPLY WITH LOW POWER CONSUMPTION HICCUP STANDBY OPERATION	United States	61/256738	30-Oct-2009	Pending
TRENCH GUARDED SCHOTTKY DIODE COMPATIBLE WITH POWER DIE;	United States	61/259399	09-Nov-2009	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
STRUCTURE AND METHOD				
TRENCH GUARDED SCHOTTKY DIODE COMPATIBLE WITH POWER DIE; STRUCTURE AND METHOD	United States	61/291147	30-Dec-2009	Pending
INTEGRATED LDMOS AND SCHOTTKY	United States	61/291124	30-Dec-2009	Pending
SINGLE HALF DIE BRIDGE MADE BY LATERAL MOSFETS CONNECTED THROUGH SUBSTRATE	United States	61/256145	24-Nov-2009	Pending
STARTUP METHOD FOR SYSTEM WITH INDEPENDENT REGULATION	United States	61/262631	19-Nov-2009	Pending
CORRECTION OF NON-LINEARITIES IN ADCS	United States	61/305609	18-Feb-2010	Pending
PARTITIONED COLOR, DOUBLE RATE VIDEO DATA TRANSFER METHOD	United States	61/290861	29-Dec-2009	Pending
PACKAGING A STACK UP COUPLE INDUCTOR MAGNETIC	United States	61/267117	07-Dec-2009	Pending
IMPROVED APPARATUS AND METHODOLOGY FOR AUTOMATIC PHASE ADJUSTMENT OF A PWM OUTPUT SIGNAL OF A PROGRAMMABLE POWER SUPPLY CONTROLLER	United States	61/263456	23-Nov-2009	Pending
INTEGRATED SENSE RESISTOR COMPATIBLE WITH POWERDIE; STRUCTURE AND METHOD	United States	61/308565	26-Feb-2010	Pending
SINGLE DIE HALF-BRIDGE MADE BY LATERAL MOSFETS CONNECTED THROUGH SUBSTRATE WITH INTEGRATED SCHOTTKY	United States	61/291107	30-Dec-2009	Pending
ISOLATED BI-DIRECTION DC-DC CONVERTER STRUCTURE	United States	61/288798	21-Dec-2009	Pending
ISOLATED BI-DIRECTION DC-DC CONVERTER STRUCTURE	United States	61/319842	31-Mar-2010	Pending
PA LINEARIZATION WITH CANCELLATION- BASED PRE-DISTORTION METHOD	United States	61300328	01-Feb-2010	Pending
PA LINEARIZATION WITH CANCELLATION- BASED FEED-FORWARD METHOD	United States	61/316608	23-Mar-2010	Pending
IN-BAND INTERFERER REDUCTION FOR SHARED ANTENNA (WIRELESS LAN AND BLUETOOTH) WITH CANCELLATION-BASED METHOD	United States	61/308647	26-Feb-2010	Pending
SYSTEM AND METHOD TO REDUCE IDLE CHANNEL CURRENT AND NOISE FLOOR BY RAMPING DOWN NOISE SHAPER COEFFICIENTS	United States	61/293586	08-Jan-2010	Pending
HIGH INPUT POWER CASCADED FILTER BASED IN-BAND PA NOISE CANCELLER FOR SENSITIVE RECEIVER (MOBILE TV TUNER, GPS etc)	United States	61/308697	26-Feb-2010	Pending
ANALOG SWITCH WITH INTERNAL DEVICE	United States	61296752	20-Jan-2010	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
BODY CONTROL				
PHOTO DETECTOR IC FOR PICO-PROJECTOR APPLICATIONS	United States	61/296987	21-Jan-2010	Pending
MONOLITHIC INTEGRATION OF GAN AND SILICON DEVICES AND CIRCUITS; STRUCTURE AND METHOD	United States	61/299013	28-Jan-2010	Pending
A HIGH PRECISION CURRENT SENSING METHOD FOR USE IN AN INTEGRATED CIRCUIT	United States	61/298686	27-Jan-2010	Pending
ARCHITECTURE FOR A REFLECTION BASED LONG RANGE PROXIMITY AND MOTION DETECTOR HAVING AN INTEGRATED AMBIENT LIGHT SENSOR	United States	61298895	27-Jan-2010	Pending
NOVEL CONTROL SCHEME OF SINGLE INDUCTOR DUAL OUTPUT DC-DC CONVERTER FOR SOLAR AND MODULE APPLICATION	United States	61/300579	02-Feb-2010	Pending
SYSTEM AND METHOD FOR NON-INVERTING BUCK BOOST CONVERTERS	United States	61/299511	29-Jan-2010	Pending
IMPROVED METHOD OF MAKING SEMICONDUCTOR DEVICE WITH LOW PINCH OFF JFET SECTION FORMED BELOW SEMICONDUCTOR SURFACE	United States	61/303996	12-Feb-2010	Pending
ULTRASONIC FEATURE WITH ULTRA LOW QUIESCENT CURRENT FOR DC-DC COVNERTER	United States	61/316226	22-Mar-2010	Pending
MODULATION SCHEME WITH A SINGLE COMPARATOR FOR CONSTANT FREQUENCY BUCK-BOOST CONVERTER	United States	61/315587	19-Mar-2010	Pending
METHOD FOR IMPLEMENTATION OF AN R4 MODULATED SWITCH MODE CONVERTER AS MULTIPHASE OR MULTIMODULE	United States	61/317761	26-Mar-2010	Pending
METHOD OF FABRICATING A SEMICONDUCTOR DEVICE LAYER WITH BURIED LAYERS ONTO A BURIED INSULATOR/HANDLE WAFER STRUCTURE	United States	61/317083	24-Mar-2010	Pending
SILICON PHOTODETECTOR/DEMODULATOR USING CONDUCTIVE TRENCH CONTACTS TO ENHANCE LATERAL ELECTRIC FIELD	United States	61/321972	08-Apr-2010	Pending
INTERMITTENT DIODE BRAKING SCHEME	United States	61320043	01-Apr-2010	Pending
NOVEL LINEAR PWM EXTENSION FOR HIGH DUTY CYCLE APPLICATIONS	United States	61/307586	24-Feb-2010	Pending
LASER DECAPSULATION APPARATUS AND METHOD	United States	12/435441	05-May-2009	Pending
CURRENT MODE DC/DC CONVERTER WITH CONTROLLED OUTPUT IMPEDANCE	United States	11/294700	05-Dec-2005	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SYNCHRONOUS-RECTIFIED DC TO DC CONVERTER WITH IMPROVED CURRENT SENSING AND ASSOCIATED METHODS	United States	11/337925	23-Jan-2006	Pending
MULTI-PHASE CONVERTER WITH BALANCED CURRENTS	United States	12/325874	01-Dec-2008	Pending
THERMAL COMPENSATED CURRENT SENSING OF INTRINSIC POWER CONVERTER ELEMENTS	United States	11/726407	21-Mar-2007	Pending
A SEMICONDUCTOR DEVICE MANUFACTURING WITH A REDUCED MASK COUNT BURIED LAYER	United States	10/958229	05-Oct-2004	Pending
ACTIVE MODE LINE VOLTAGE REGULATOR FOR RINGING SUBSCRIBER LINE INTERFACE CIRCUIT	United States	12/260697	29-Oct-2008	Pending
PROGRAMMABLE CURRENT-SENSING CIRCUIT PROVIDING CONTINUOUS TEMPERATURE COMPENSATION FOR DC-DC CONVERTER	United States	12/426884	20-Apr-2009	Pending
METHOD OF SETTING BI-DIRECTIONAL OFFSET IN A PWM CONTROLLER USING A SINGLE PIN	United States	12/254450	20-Oct-2008	Pending
METHOD AND STRUCTURE FOR NON-SINGLE-POLYCRYSTALLINE CAPACITOR IN AN INTEGRATED CIRCUIT	United States	12/200307	28-Aug-2008	Pending
METHOD TO PREVENT BOOSTING SYSTEM BUS WHEN CHARGING THE BATTERY	United States	12/492635	26-Jun-2009	Pending
PHASE SHIFT MODULATION-BASED CONTROL OF AMPLITUDE OF AC VOLTAGE OUTPUT PRODUCED BY DOUBLE-ENDED DC-AC CONVERTER CIRCUITRY FOR POWERING HIGH VOLTAGE LOAD SUCH AS COLD CATHODE FLUORESCENT LAMP	United States	12/547882	26-Aug-2009	Pending
SWITCHING AMPLIFIER OPTIMIZED FOR MINIMAL AND STABLE OUTPUT SEMICONDUCTOR DEAD TIMES	United States	12/270692	13-Nov-2008	Published
SYSTEMS AND METHODS FOR IMPROVED OVER-CURRENT CLIPPING	United States	12/346211	30-Dec-2008	Published
SILICON-CONTROLLED RECTIFIER (SCR) DEVICE FOR HIGH-VOLTAGE ELECTROSTATIC DISCHARGE (ESD) APPLICATIONS	United States	12/366159	05-Feb-2009	Pending
<i>* The following registered patents were assigned to Intersil Americas, Inc. pursuant to a Contribution Agreement between Intersil Communications, Inc. (formerly Intersil Corporation) and Intersil Americas, Inc., dated December 31, 2001. However, the USPTO records indicate that the current holder of these patents is Intersil Corporation.</i>				
HIGH SPEED DIFFERENTIAL	United States	5329187	12-Jul-1994	Granted

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COMPARATOR				
HIGH SPEED DIFFERENTIAL COMPARATOR	United States	5332931	26-Jul-1994	Granted
SPIRAL EDGE PASSIVATION STRUCTURE FOR SEMICONDUCTOR DEVICES	United States	5382825	17-Jan-1995	Granted
LOW INDUCTANCE POWER PACKAGE DESIGN	United States	5569957	29-Oct- 1996	Granted
LEVEL SHIFT CIRCUIT WITH COMMON MODE REJECTION	United States	5105099	14-Apr- 1992	Granted
BRIDGE CONTROL CIRCUIT AND METHOD	United States	5870266	09-Feb- 1999	Granted
DIFFERENTIAL AMPLIFIER WITH HYSTERISIS	United States	5367211	22-Nov- 1994	Granted
CIRCUIT FOR PROVIDING A CURRENT PROPORTIONAL TO ABSOLUTE TEMPERATURE	United States	5334929	02-Aug- 1994	Granted
COMPARATOR AMPLIFIER	United States	5287068	15-Feb- 1994	Granted
IMPROVED NON-LINEAR OTA	United States	5307023	26-Apr- 1994	Granted
ELECTRICALLY PROGRAMMABLE MEMORY CELL	United States	5640346	17-Jun- 1997	Granted
OVER-VOLTAGE SENSOR WITH HYSTERESIS	United States	5335132	02-Aug- 1994	Granted
BIMOS CURRENT DRIVER CIRCUIT	United States	5262689	16-Nov- 1993	Granted
INDUCTIVE LOAD DUMP CIRCUIT	United States	5347169	13-Sep- 1994	Granted
AMPLIFIER WITH HIGH COMMON MODE REJECTION	United States	5287071	15-Feb- 1994	Granted
AMPLIFIER SYSTEM FOR LOW LEVEL SIGNAL	United States	5406223	11-Apr- 1995	Granted
FAIL-SAFE MOS SHUTDOWN CIRCUITRY	United States	5574609	12-Nov- 1996	Granted
DIFFERENTIAL VOLTAGE MONITOR USING A BRIDGE CIRCUIT WITH RESISTORS ON AND OFF OF AN INTEGRATED CIRCUIT	United States	5583442	10-Dec- 1996	Granted
INTEGRATED CIRCUIT THERMAL SENSOR	United States	5359236	25-Oct- 1994	Granted
CURRENT RISE AND FALL TIME LIMITED VOLTAGE FOLLOWER	United States	5420499	30-May- 1995	Granted
APPARATUS FOR CONTROLLING THE	United States	5610792	11-Mar-	Granted

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RESET OF A BUS CONNECTED TRANSCIEVER			1997	
REVERSE CURRENT FLOW PREVENTION IN A DIFFUSED RESISTOR	United States	5608259	04-Mar- 1997	Granted
CURRENT MIRROR WITH SATURATION LIMITING	United States	5508551	16-Apr- 1996	Granted
DIRECT THERMOCOMPRESSSION BONDING TECHNOLOGY FOR THIN ELECTRONIC POWER CHIP PACKAGES	United States	5206186	27-Apr- 1993	Granted
DIRECT THERMOCOMPRESSSION BONDING TECHNOLOGY FOR THIN ELECTRONIC POWER CHIP PACKAGES	United States	5304847	19-Apr- 1994	Granted
DIRECT BONDING OF COPPER TO ALUMINUM NITRIDE SUBSTRATES	United States	5418002	23-May- 1995	Granted
SIMULATION OF NOISE BEHAVIOR OF NON-LINEAR CIRCUIT	United States	5682336	28-Oct- 1997	Granted
DOUBLE DUTY CAPACITOR CIRCUIT AND METHOD	United States	5528682	18-Jun- 1996	Granted
CURRENT MODE RING TRIP DETECTOR	United States	5671272	23-Sep- 1997	Granted
A FILTER WITH REDUCED ELEMENT RATINGS AND METHOD	United States	5572162	05-Nov- 1996	Granted
METHOD FOR MAKING OHMIC CONTACT TO LIGHTLY DOPED ISLAND FROM A SILICIDE BURIED LAYER AND APPLICATION	United States	5643821	01-Jul-1997	Granted
METHOD FOR MAKING OHMIC CONTACT TO LIGHTLY DOPED ISLAND FROM A SILICIDE BURIED LAYER AND APPLICATION	United States	5895953	20-Apr- 1999	Granted
TWO TRIM CURRENT SOURCE AND METHOD FOR A DIGITAL-TO-ANALOG CONVERTER	United States	5923209	13-Jul-1999	Granted
PROCESS FOR DOPING TWO LEVELS OF A DOUBLE POLY BIPOLAR TRANSISTOR AFTER FORMATION OF SECOND POLY LAYER	United States	5614422	25-Mar- 1997	Granted
PROCESS FOR DOPING TWO LEVELS OF A DOUBLE POLY BIPOLAR TRANSISTOR AFTER FORMATION OF SECOND POLY LAYER	United States	5686322	11-Nov- 1997	Granted
PROCESS FOR DOPING TWO LEVELS OF A DOUBLE POLY BIPOLAR TRANSISTOR AFTER FORMATION OF SECOND POLY	United States	5776814	07-Jul-1998	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
LAYER				
A DIFFERENTIAL LONGITUDINAL AMPLIFIER FOR SUBSCRIBER LINE INTERFACE CIRCUIT	United States	5649009	15-Jul-1997	Granted
SAMPLED DATA BIASING OF CONTINUOUS TIME INTEGRATED CIRCUIT	United States	5621355	15-Apr- 1997	Granted
SIGMA DELTA ANALOG TO DIGITAL CONVERTER WITH THREE POINT CALIBRATION APARATUS AND METHOD	United States	5598157	28-Jan-1997	Granted
INTEGRATED CIRCUIT AIR BRIDGE STRUCTURES AND METHOD OF FABRICATING SAME	United States	6211056	03-Apr- 2001	Granted
INTEGRATED CIRCUIT AIR BRIDGE STRUCTURES AND METHOD OF FABRICATING SAME	United States	6492705	10-Dec- 2002	Granted
NON-UNIFORMLY NITRIDED GATE OXIDE AND METHOD	United States	5650344	22-Jul-1997	Granted
NON-UNIFORMLY NITRIDED GATE OXIDE AND METHOD	United States	5808348	15-Sep- 1998	Granted
PLASMA CLEANING METHOD FOR IMPROVED DIE TO SUBSTRATE SOLDERABILITY	United States	5833758	10-Nov- 1998	Granted
DIRECT ETCH FOR THIN FILM RESISTOR USING A HARD MASK	United States	5547896	20-Aug- 1996	Granted
DEVICE AND METHOD FOR ENHANCING THERMAL AND HIGH FREQUENCY PERFORMANCE OF INTEGRATED CIRCUIT PACKAGES	United States	5581444	03-Dec- 1996	Granted
A BI-MOS DRIVER CIRCUIT WITH REDUCED POWER SUPPLY GLITCHES	United States	5576654	19-Nov- 1996	Granted
SURFACE MOUNT DIE BY HANDLE REPLACEMENT	United States	5807783	15-Sep- 1998	Granted
SURFACE MOUNT DIE BY HANDLE REPLACEMENT	United States	6114768	05-Sep- 2000	Granted
PRE-BOND CAVITY AIR BRIDGE	United States	5949144	07-Sep- 1999	Granted
CONFIGURATION DEPENDENT AUTO- BIASING OF BIPOLAR TRANSISTOR	United States	5625566	29-Apr- 1997	Granted
LID WAFER BOND PACKAGING AND MICROMACHINING	United States	5798557	25-Aug- 1998	Granted
LID WAFER BOND PACKAGING AND MICROMACHINING	United States	5915168	22-Jun- 1999	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
DEVICE AND METHOD FOR IMPROVING CORROSION RESISTANCE AND ETCH TOOL INTEGRITY IN DRY METAL ETCHING	United States	5830279	03-Nov-1998	Granted
LEVEL SHIFTER WITH IMPROVED REJECTION OF VOLTAGE VARIATIONS	United States	5627489	06-May-1997	Granted
SWITCH CONTROLLER AND METHOD	United States	5636274	03-Jun-1997	Granted
HIGH VOLTAGE, JUNCTION ISOLATION SEMICONDUCTOR DEVICE HAVING DUAL CONDUCTIVITY TYPE BURIED REGIONS AND ITS PROCESS OF MANUFACTURE	United States	5567978	22-Oct-1996	Granted
HIGH VOLTAGE, JUNCTION ISOLATION SEMICONDUCTOR DEVICE HAVING DUAL CONDUCTIVITY TYPE BURIED REGIONS AND ITS PROCESS OF MANUFACTURE	United States	5837553	17-Nov-1998	Granted
BONDED WAFER	United States	5603779	18-Feb-1997	Granted
BONDED WAFER	United States	5744852	28-Apr-1998	Granted
FAST RECOVERY TEMPERATURE COMPENSATED PRECISION REFERENCE SOURCE	United States	5621307	15-Apr-1997	Granted
HIGH EFFICIENCY QUASI-VERTICAL DMOS IN A CMOS OR BICMOS PROCESS	United States	5777362	07-Jul-1998	Granted
HIGH EFFICIENCY POWER MOS SWITCH	United States	5689129	18-Nov-1997	Granted
HIGH EFFICIENCY POWER MOS SWITCH	United States	5973368	26-Oct-1999	Granted
PILOT TRANSISTOR FOR QUASI-VERTICAL DMOS	United States	5684305	04-Nov-1997	Granted
METHOD AND CIRCUIT FOR FAILSAFE SWITCH-HOOK DETECTION DURING FAULT IN A TELEPHONE SYSTEM	United States	5812658	22-Sep-1998	Granted
CIRCUIT AND METHOD FOR LOOPBACK TEST AND ON-HOOK TRANSMISSION INTEGRATED INTO A TELEPHONE SUBSCRIBER LINE INTERFACE CIRCUIT	United States	5659570	19-Aug-1997	Granted
LOCAL OXIDATION PROCESS FOR HIGH FIELD THRESHOLD APPLICATIONS	United States	5580816	03-Dec-1996	Granted
IMPROVED DISCRETE PROGRAMMING	United States	5666083	09-Sep-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
METHODOLOY AND CIRCUIT FOR AN ACTIVE TRANSDUCTANCE C- FILTER			1997	
STATISTICALLY BASED CURRENT GENERATOR CIRCUIT	United States	5701097	23-Dec- 1997	Granted
SEMICONDUCTOR PACKAGING APPARATUS	United States	5965933	12-Oct- 1999	Granted
SEMICONDUCTOR PACKAGING APPARATUS	United States	6114191	05-Sep- 2000	Granted
CRC GENERATION & DETECTION METHOD	United States	5724370	03-Mar- 1998	Granted
METHOD OF SCALING THE OUTPUTS OF A BINARY COUNTER	United States	5526392	11-Jun- 1996	Granted
MODIFICATION OF TIMING IN AN EMULATOR CIRCUIT AND METHOD	United States	5678030	14-Oct- 1997	Granted
MULTIPLE USE TIMER AND METHOD FOR PULSE WIDTH GENERATION, ECHO FAILURE DETECTION, AND RECEIVE PULSE WIDTH MEASUREMENT	United States	5661736	26-Aug- 1997	Granted
CIRCUIT AND METHOD FOR SYNCHRONIZING OUTPUTS OF TWO SIMULTANEOUSLY TRANSMITTING DEVICES IN A MULTIPLEXED COMMUNICATION SYSTEM	United States	6108352	22-Aug- 2000	Granted
EFFICIENT BATTERY OPERATED INVERTER CIRCUIT FOR CAPACITIVE LOADS SUCH AS ELECTROLUMINESCENT LAMPS	United States	5525869	11-Jun- 1996	Granted
BATTERY OPERATED INVERTER CIRCUIT FOR CAPACITIVE LOADS SUCH AS ELECTROLUMINESCENT LAMPS	United States	5557175	17-Sep- 1996	Granted
INTEGRATED CIRCUIT WITH AN AIR BRIDGE HAVING A LID	United States	5825092	20-Oct- 1998	Granted
INTEGRATED CIRCUIT HAVING ENHANCED TRANSIENT VOLTAGE PROTECTION AND ASSOCIATED METHODS	United States	5708549	13-Jan-1998	Granted
MULTICHANNEL SIGMA-DELTA A/D CONVERTERS WITH IMPROVED THROUGHPUT	United States	5617090	01-Apr- 1997	Granted
METHOD AND CIRCUIT FOR PREVENTING FORWARD BIAS OF A PARASITIC DIODE IN AN INTEGRATED	United States	5675281	07-Oct- 1997	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
CIRCUIT				
ELECTRICALLY VARIABLE R/C NETWORK AND METHOD	United States	5767757	16-Jun-1998	Granted
COMPLEMENTARY MULTIPLEXER WITH LOW DISABLED-OUTPUT CAPACITANCE, AND METHOD	United States	5923207	13-Jul-1999	Granted
COMPLEMENTARY MULTIPLEXER WITH LOW DISABLED-OUTPUT CAPACITANCE, AND METHOD	United States	6114896	05-Sep-2000	Granted
AUTOMATIC FAULT MONITORING SYSTEM AND MOTOR CONTROL SYSTEM INCORPORATING SAME	United States	5642247	24-Jun-1997	Granted
COMPOSITION, AND METHOD FOR USING SAME, FOR ETCHING METALLIC ALLOYS FROM A SUBSTRATE	United States	5587103	24-Dec-1996	Granted
ELECTROLUMINESCENT LAMP DRIVER SYSTEM	United States	5539707	23-Jul-1996	Granted
DEFECT CONTROL IN FORMATION OF DIELECTRICALLY ISOLATED SEMICONDUCTOR DEVICE REGIONS	United States	5750432	12-May-1998	Granted
ELECTROSTATIC DISCHARGE PROTECTION DEVICE	United States	5883414	16-Mar-1999	Granted
ELECTROSTATIC DISCHARGE PROTECTION DEVICE	United States	6051457	18-Apr-2000	Granted
SEMI-INSULATING WAFER	United States	5773151	30-Jun-1998	Granted
METHOD OF MAKING A REFERENCE CURRENT GENERATOR	United States	5686822	11-Nov-1997	Granted
ARRANGEMENT & METHOD FOR IMPROVING ROOM-TEMPERATURE TESTABILITY OF CMOS INTEGRATED CIRCUITS OPTIMIZED FOR CRYOGENIC TEMPERATURE OPERATOR	United States	5696452	09-Dec-1997	Granted
METHOD OF MANUFACTURING A PROGRAMMABLE HYBRID BALANCE NETWORK	United States	5610093	11-Mar-1997	Granted
TESTING CIRCUIT FOR A CODEC HYBRID BALANCE NETWORK	United States	5717736	10-Feb-1998	Granted
DIFFERENTIAL INTERPOLATION SWITCHED CAPACITOR FILTER AND METHOD	United States	5680072	21-Oct-1997	Granted
TEMPERATURE INSENSITIVE BANDGAP VOLTAGE GENERATOR TRACKING POWER SUPPLY VARIATIONS	United States	5856742	05-Jan-1999	Granted

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OFFSET ADJUSTMENT FOR FULLY DIFFERENTIAL AMPLIFIERS	United States	5736885	07-Apr-1998	Granted
SIGN BIT INTEGRATOR AND METHOD	United States	5617473	01-Apr-1997	Granted
METHOD OF BONDING WAFERS HAVING VIAS INCLUDING CONDUCTIVE MATERIAL	United States	5646067	08-Jul-1997	Granted
SURFACE MOUNTABLE INTEGRATED CIRCUIT WITH CONDUCTIVE VIAS	United States	5608264	04-Mar-1997	Granted
INTEGRATED CIRCUIT WITH COAXIAL ISOLATION AND METHOD	United States	5814889	29-Sep-1998	Granted
INTEGRATED CIRCUIT WITH EDGE CONNECTIONS AND METHOD	United States	5668409	16-Sep-1997	Granted
SYSTEM FOR INTERCONNECTING STACKED INTEGRATED CIRCUITS	United States	5682062	28-Oct-1997	Granted
WIDE COMMON MODE RANGE COMPARATOR AND METHOD	United States	5614852	25-Mar-1997	Granted
WIDE COMMON MODE RANGE COMPARATOR AND METHOD	United States	5789949	04-Aug-1998	Granted
INVERTED BJT CURRENT SOURCES/SINKS IN RF CIRCUITS AND METHODS	United States	5654662	05-Aug-1997	Granted
PHASE METER AND METHOD OF PROVIDING A VOLTAGE INDICATIVE OF A PHASE DIFFERENCE	United States	5831423	03-Nov-1998	Granted
UP-CONVERSION MECHANISM EMPLOYING SIDE LOBE-SELECTIVE PRE-DISTORTION FILTER AND FREQUENCY REPLICA-SELECTING BANDPASS FILTER RESPECTIVELY INSTALLED UPSTREAM AND DOWNSTREAM OF DIGITAL-TO-ANALOG CONVERTER	United States	5930301	27-Jul-1999	Granted
DC-TO-DC CONVERTER HAVING ENHANCED CONTROL FEATURES AND ASSOCIATED METHODS	United States	5793193	11-Aug-1998	Granted
DC-TO-DC CONVERTER HAVING FAST OVER-CURRENT DETECTION AND ASSOCIATED METHODS	United States	5821740	13-Oct-1998	Granted
DC-TO-DC CONVERTER HAVING CHARGE PUMP AND ASSOCIATED METHODS	United States	5808883	15-Sep-1998	Granted
METHOD TO IMPROVE THE PEAK-CURRENT LIMIT IN SLOPE-	United States	5717322	10-Feb-1998	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
COMPENSATED, CURRENT-MODE DC/DC CONVERTERS				
METHOD & APPARATUS FOR RADIATION HARDENED ISOLATION	United States	5670413	23-Sep- 1997	Granted
COMMON MODE STABILIZING CIRCUIT AND METHOD	United States	5668468	16-Sep- 1997	Granted
CURRENT-CONTROLLED CARRIER TRACKING FILTER FOR IMPROVED SPURIOUS SIGNAL SUPPRESSION	United States	5953379	14-Sep- 1999	Granted
CURRENT-CONTROLLED CARRIER TRACKING FILTER FOR IMPROVED SPURIOUS SIGNAL SUPPRESSION	United States	6233293	15-May- 2001	Granted
CARRIER BUFFER HAVING CURRENT- CONTROLLED TRACKING FILTER FOR SPURIOUS SIGNAL SUPPRESSION	United States	5736903	07-Apr- 1998	Granted
DIGITALLY PROGRAMMABLE DIFFERENTIAL ATTENUATOR WITH TRACKING COMMON MODE REFERENCE	United States	5742204	21-Apr- 1998	Granted
INTERPOLATING DIGITAL TO ANALOG CONVERTER ARCHITECTURE FOR IMPROVED SPURIOUS SIGNAL SUPPRESSION	United States	5798724	29-Aug- 1998	Granted
CLOCK -CONTROLLED PRECISION MONOSTABLE CIRCUIT	United States	5920219	06-Jul-1999	Granted
CHARGE BASED FREQUENCY LOCKED LOOP AND METHOD	United States	5841324	24-Nov- 1998	Granted
REDUCED WIDTH, DIFFERENTIALLY DOPED VERTICAL JFET DEVICE	United States	5945699	31-Aug- 1999	Granted
PLANARIZATION METHOD BY THE USE OF PARTICLE DISPERSION AND SUBSEQUENT THERMAL FLOW	United States	5837603	17-Nov- 1998	Granted
A CIRCUIT FOR DRIVING AN ELECTROLUMINESCENT LAMP	United States	5677599	14-Oct- 1997	Granted
LOW DISTORTION CURRENT FEEDBACK AMPLIFIER WITH DYNAMIC BIASING	United States	5977829	02-Nov- 1999	Granted
SEMICONDUCTOR DEVICE WITH DOPED SEMICONDUCTOR AND DIELECTRIC TRENCH SIDEWALL LAYERS	United States	5856700	05-Jan-1999	Granted
FLAT POWER PACK	United States	6057612	02-May- 2000	Granted
PROCESS FOR FORMING A SELF- ALIGNED RAISED SOURCE/DRAIN MOS DEVICE AND DEVICE THEREFROM	United States	5804846	08-Sep- 1998	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
WAFER TRENCH ARTICLE AND PROCESS	United States	5933746	03-Aug-1999	Granted
WAFER TRENCH ARTICLE AND PROCESS	United States	6365953	02-Apr-2002	Granted
INTEGRATED CIRCUIT ANALOG-TO-DIGITAL CONVERTER AND ASSOCIATED CALIBRATION METHOD AND APPARATUS	United States	5771012	23-Jun-1998	Granted
INTEGRATED CIRCUIT CONTAINING DEVICES DIELECTRICALLY ISOLATED AND JUNCTION ISOLATED FROM A SUBSTRATE	United States	5841169	24-Nov-1998	Granted
DOUBLE DIFFUSED MOS DEVICE AND METHOD	United States	5817564	06-Oct-1998	Granted
HIGH VOLTAGE PROTECTION CIRCUITS	United States	5663860	02-Mar-1998	Granted
DIGITAL-TO-ANALOG CONVERTER HAVING ENHANCED CURRENT STEERING AND ASSOCIATED METHOD	United States	5790060	04-Aug-1998	Granted
DEEP TRENCH ETCH ON BONDED SILICON WAFER	United States	5914280	22-Jun-1999	Granted
DEEP TRENCH ETCH ON BONDED SILICON WAFER	United States	6198150	06-Mar-2001	Granted
P COLLECTOR HV PMOS SWITCH VT ADJUSTED SOURCE	United States	5770880	23-Jun-1998	Granted
RADIATION HARDENED DIELECTRIC FOR EEPROM	United States	5808353	15-Sep-1998	Granted
RADIATION HARDENED DIELECTRIC FOR EEPROM	United States	6130172	10-Oct-2000	Granted
NETWORK FOR IMPROVING ELECTRO-MAGNETIC INTERFERENCE RESPONSE	United States	5920224	06-Jul-1999	Granted
NETWORK FOR IMPROVING ELECTRO-MAGNETIC INTERFERENCE RESPONSE	United States	6091274	18-Jul-2000	Granted
RECONFIGURABLE FILTER SYSTEM	United States	5719326	17-Feb-1998	Granted
KNOCK SENSOR SYSTEM FOR DETECTING AND RESPONDING TO A DISCONNECT CONDITION (AS AMENDED)	United States	5942677	24-Aug-1999	Granted
COMPARATOR WITH SMALL SIGNAL SUPPRESSION CIRCUITRY	United States	5892375	06-Apr-1999	Granted
COMPARATOR WITH SMALL SIGNAL SUPPRESSION CIRCUITRY	United States	6060913	09-May-2000	Granted
PIVOT SAMPLE BLOCK CROSS-SECTION	United States	5830048	03-Nov-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
TOOL			1998	
MULTILAYER MICROTIP PROBE AND METHOD	United States	5892223	06-Apr-1999	Granted
INTERPOLATOR USING A PLURALITY OF POLYNOMIAL EQUATIONS AND ASSOCIATED METHODS	United States	5949695	07-Sep-1999	Granted
RE-SAMPLING CIRCUIT AND ASSOCIATED METHOD	United States	5764113	09-Jun-1998	Granted
ADJUSTABLE PHASE CLOCK CIRCUIT USING THE SAME AND RELATED METHODS	United States	5990713	23-Nov-1999	Granted
INTEGRATED CIRCUIT CHIP STRUCTURE FOR IMPROVED PACKAGING	United States	5900643	04-May-1999	Granted
METHOD AND APPARATUS FOR CALIBRATING INTEGRATED CIRCUIT ANALOG-TO-DIGITAL CONVERTERS	United States	5861826	19-Jan-1999	Granted
ESD LOCATING APPARATUS AND METHOD	United States	6064340	16-May-2000	Granted
INTEGRATED CIRCUIT WITH THIN FILM RESISTORS AND A METHOD FOR CO-PATTERNING THIN FILM RESISTORS WITH DIFFERENT COMPOSITIONS	United States	5976944	02-Nov-1999	Granted
DRIVER CIRCUIT PROVIDING CONTROLLABLE BATTERY OVERLOAD PROTECTION	United States	5744984	28-Apr-1998	Granted
RING GENERATOR	United States	6167131	26-Dec-2000	Granted
METHOD FOR FORMING COMPLIMENTARY WELLS AND SELF-ALIGNED TRENCH WITH A SINGLE MASK	United States	5956583	21-Sep-1999	Granted
INVERTED THIN FILM RESISTOR AND METHOD FOR MANUFACTURE	United States	6034411	07-Mar-2000	Granted
INVERTED THIN FILM RESISTOR AND METHOD FOR MANUFACTURE	United States	6121105	19-Sep-2000	Granted
PROCESSOR CONTROLLED ANALOG-TO-DIGITAL CONVERTER CIRCUIT	United States	5892472	06-Apr-1999	Granted
DC-DC CONVERTER HAVING DYNAMIC REGULATOR WITH CURRENT SOURCING AND SINKING MEANS	United States	5926384	20-Jul-1999	Granted
HERMETIC THIN PACK SEMICONDUCTOR DEVICE	United States	6157076	05-Dec-2000	Granted
METHOD OF CREATING A SOLDERABLE METAL LAYER ON GLASS OR CERAMIC	United States	6159663	20-Dec-2000	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SCHMITT TRIGGER-CONFIGURED ESD PROTECTION CIRCUIT	United States	5978192	02-Nov-1999	Granted
DEFECT GETTERING BY INDUCED STRESS	United States	5929508	27-Jul-1999	Granted
DEFECT GETTERING BY INDUCED STRESS	United States	6274460	14-Aug-2001	Granted
LOOP IMPEDANCE MEASURING APPARATUS AND METHOD FOR SUBSCRIBER LOOP INTERFACE CIRCUITS	United States	6434232	13-Aug-2002	Granted
PROGRAMMABLE SUBSCRIBER LOOP INTERFACE CIRCUIT AND METHOD	United States	6665398	16-Dec-2003	Granted
APPARATUS AND METHOD FOR TESTING SUBSCRIBER LOOP INTERFACE CIRCUITS	United States	6519322	11-Feb-2003	Granted
APPARATUS AND METHOD FOR TESTING SUBSCRIBER LOOP INTERFACE CIRCUITS	United States	7020248	28-Mar-2006	Granted
RF COMMUNICATIONS SYSTEM OPERABLE IN THE PRESENCE OF A REPETITIVE INTERFERENCE SOURCE AND RELATED METHODS	United States	6006071	21-Dec-1999	Granted
BATTERY SWITCHING SUBSCRIBER LOOP INTERFACE CIRCUIT	United States	6233335	15-May-2001	Granted
CONSTANT SLEW-RATE AMPLIFIER	United States	6040707	21-Mar-2000	Granted
DIGITAL-TO-ANALOG CONVERTER INCLUDING CURRENT CELL MATRIX WITH ENHANCED LINEARITY AND ASSOCIATED METHODS	United States	5949362	07-Sep-1999	Granted
SAMPLE-AND-HOLD CIRCUIT HAVING REDUCED SUBTHRESHOLD CONDUCTION EFFECTS AND RELATED METHODS	United States	6069502	30-May-2000	Granted
SAMPLE AND HOLD CIRCUIT HAVING REDUCED AMPLIFIER OFFSET EFFECTS AND RELATED METHODS	United States	6016067	18-Jan-2000	Granted
CO-PATTERNING THIN-FILM RESISTORS OF DIFFERENT COMPOSITIONS WITH A CONDUCTIVE HARD MASK AND METHOD FOR SAME	United States	6441447	27-Aug-2002	Granted
SC-2 BASED PRE-THERMAL TREATMENT WAFER CLEANING PROCESS	United States	5932022	03-Aug-1999	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
IGBT GATE DRIVE CIRCUIT WITH SHORT CIRCUIT PROTECTION	United States	6275093	14-Aug-2001	Granted
DECAPSULATING METHOD AND APPARATUS FOR INTEGRATED CIRCUIT PACKAGES	United States	6054012	25-Apr-2000	Granted
DECAPSULATING METHOD AND APPARATUS FOR INTEGRATED CIRCUIT PACKAGES	United States	6457506	01-Oct-2002	Granted
DEVICES WITH PATTERNED WELLS AND METHOD FOR FORMING SAME	United States	6555894	29-Apr-2003	Granted
SUBSAMPLING DIGITIZER-BASED FREQUENCY SYNTHESIZER	United States	6603362	05-Aug-2003	Granted
MULTIPLE OUTPUT DC-TO-DC CONVERTER HAVING ENHANCED NOISE MARGIN AND RELATED METHODS	United States	6058030	02-May-2000	Granted
ANALOG-TO-DIGITAL CONVERTER HAVING ENHANCED ACCURACY GAIN STAGE, AND ASSOCIATED DEVICES AND METHODS	United States	6107950	22-Aug-2000	Granted
SAMPLE-AND-HOLD CIRCUIT HAVING REDUCED PARASITIC DIODE EFFECTS AND RELATED METHODS	United States	6002277	14-Dec-1999	Granted
PARASITIC CURRENT BARRIERS	United States	6278186	21-Aug-2001	Granted
DIGITAL-TO-ANALOG CONVERTER HAVING ENHANCED ACCURACY AND ASSOCIATED METHODS	United States	6118398	12-Sep-2000	Granted
LINEAR VOLTAGE REGULATOR COMPATIBLE WITH BIPOLAR AND MOSFET PASS DEVICES AND ASSOCIATED METHODS	United States	6005303	21-Dec-1999	Granted
DEVICE CONTAINING SAMPLE PREPARATION SITES FOR TRANSMISSION ELECTRON MICROSCOPIC ANALYSIS AND PROCESSES OF FORMATION AND USE	United States	6140652	31-Oct-2000	Granted
BRUSHLESS MULTIPASS SILICON WAFER CLEANING PROCESS FOR POST CHEMICAL MECHANICAL POLISHING USING IMMERSION	United States	6526995	04-Mar-2003	Granted
METHOD FOR MAKING A DIFFUSED BACK-SIDE LAYER ON A BONDED-WAFER WITH A THICK BOND OXIDE	United States	6362075	26-Mar-2002	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
METHOD FOR MAKING A DIFFUSED BACK-SIDE LAYER ON A BONDED-WAFER WITH A THICK BOND OXIDE	United States	7605052	20-Oct-2009	Granted
BONDED SUBSTRATE FOR AN INTEGRATED CIRCUIT CONTAINING A PLANAR INTRINSIC GETTERING ZONE (as amended)	United States	6255195	03-Jul-2001	Granted
USE OF BARRIER REFRACTIVE OR ANTI-REFLECTIVE LAYER TO IMPROVED LASER TRIM CHARACTERISTICS OF THIN FILM RESISTORS	United States	6259151	10-Jul-2001	Granted
ACCESSING MAIN ATX OUTPUTS WITHOUT MONITORING ALL OUTPUTS	United States	6882942	19-Apr-2005	Granted
METHOD OF FORMING RESISTIVE CONTACTS ON INTEGRATED CIRCUITS WITH MOBILITY SPOILING IONS INCLUDING HIGH RESISTIVE CONTACTS AND LOW RESISTIVITY SILICIDE CONTACTS	United States	6403472	11-Jun-2002	Granted
LINE CIRCUIT APPARATUS FOR SUPPLYING POWER TO A TELEPHONE SET IN TELECOMMUNICATION SYSTEMS	United States	6137189	24-Oct-2000	Granted
METHOD OF MANUFACTURING A PLATED ELECTRONIC TERMINATION	United States	7174626	13-Feb-2007	Granted
EDGE TERMINATION FOR SILICON POWER DEVICES	United States	6242784	05-Jun-2001	Granted
EDGE TERMINATION FOR SILICON POWER DEVICES	United States	6534347	18-Mar-2003	Granted
EDGE TERMINATION FOR SILICON POWER DEVICES	United States	6759719	06-Jul-2004	Granted
EDGE TERMINATION FOR SILICON POWER DEVICES	United States	7166866	23-Jan-2007	Granted
LOW TEMPERATURE COEFFICIENT RESISTOR (TCRL)	United States	6351021	26-Feb-2002	Granted
LOW TEMPERATURE COEFFICIENT RESISTOR (TCRL)	United States	6798024	28-Sep-2004	Granted
LOW TEMPERATURE COEFFICIENT RESISTOR (TCRL)	United States	6812108	02-Nov-2004	Granted
CURRENT MODE DC/DC CONVERTER WITH CONTROLLED OUTPUT IMPEDANCE	United States	RE38780	23-Aug-2005	Granted
CURRENT MODE DC/DC CONVERTER	United States	RE38906	06-Dec-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
WITH CONTROLLED OUTPUT IMPEDANCE			2005	
BACKWARDS DRIVABLE MOS OUTPUT DRIVER	United States	6351158	26-Feb- 2002	Granted
BACKWARDS DRIVABLE MOS OUTPUT DRIVER	United States	6362665	26-Mar- 2002	Granted
METHODS TO CONTROL THE DROOP WHEN POWERING DUAL MODE PROCESSORS AND ASSOCIATED CIRCUITS	United States	6680604	20-Jan-2004	Granted
METHODS TO CONTROL THE DROOP WHEN POWERING DUAL MODE PROCESSORS AND ASSOCIATED CIRCUITS	United States	6919715	19-Jul-2005	Granted
BREAKDOWN IMPROVEMENT METHOD AND STRUCTURE FOR LATERAL EXTENSION MOS DEVICE	United States	6614088	02-Sep- 2003	Granted
PRECISION, LOW-POWER CURRENT- SENSE TRANSMISSION CHANNEL FOR SUBSCRIBER LINE INTERFACE CIRCUIT, PROGRAMMABLE WITH SINGLE ENDED IMPEDANCES AND CAPABLE OF EXHIBITING A VOLTAGE SENSE RESPONSE	United States	6873703	29-Mar- 2005	Granted
MECHANISM FOR PREVENTING CLIPPING OF PULSE METERING SIGNALS IN TELEPHONE LINE CARD CHANNELS	United States	6829353	07-Dec- 2004	Granted
MECHANISM FOR MEASURING RESISTANCE OF TELEPHONE SUBSCRIBER LINE AND GENERATING MEASUREMENT AS PULSE WIDTH OF PERIODIC WAVEFORM	United States	6504927	07-Jan-2003	Granted
MECHANISM FOR GENERATING PRECISION USER-PROGRAMMABLE PARAMETERS IN ANALOG INTEGRATED CIRCUIT	United States	6407621	18-Jun- 2002	Granted
PRECISION, LOW-POWER TRANSIMPEDANCE CIRCUIT WITH DIFFERENTIAL CURRENT SENSE INPUTS AND SINGLE ENDED VOLTAGE OUTPUT	United States	6292033	18-Sep- 2001	Granted
MECHANISM FOR MINIMIZING UNDESIRABLE EFFECTS OF PARASITIC COMPONENTS IN INTEGRATED	United States	6396331	28-May- 2002	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
CIRCUITS				
TRANSCONDUCTANCE AMPLIFIER CIRCUIT	United States	6411163	25-Jun- 2002	Granted
CURRENT MIRROR-EMBEDDED LOW- PASS FILTER FOR SUBSCRIBER LINE INTERFACE CIRCUIT APPLICATIONS	United States	6545540	08-Apr- 2003	Granted
CONTROLLED SWITCHING MECHANISM FOR ACCOMPLISHING SOFT POLARITY REVERSAL, RING-TRIP FILTERING, AND LINE VOLTAGE MEASUREMENTS IN A SUBSCRIBER LINE INTERFACE CIRCUIT USING COMMON CAPACITOR	United States	6862352	01-Mar- 2005	Granted
TRANSISTOR BASE CURRENT ERROR CORRECTION SCHEME FOR LOW OVERHEAD VOLTAGE APPLICATIONS	United States	6344776	05-Feb- 2002	Granted
BIASING ARRANGEMENT FOR OPTIMIZING DC FEED CHARACTERISITICS FOR SUBSCRIBER LINE INTERFACE CIRCUIT	United States	6829354	07-Dec- 2004	Granted
OSCILLATOR HAVING REDUCED SENSITIVITY TO SUPPLY VOLTAGE CHANGES	United States	6552622	22-Apr- 2003	Granted
CASCADABLE, HIGH EFFICIENCY CHARGE PUMP CIRCUIT AND RELATED METHODS	United States	6249446	19-Jun- 2001	Granted
DC TO DC CONVERTER METHOD AND CIRCUITRY	United States	6433525	13-Aug- 2002	Granted
DC TO DC CONVERTER METHOD AND CIRCUITRY	United States	6621256	16-Sep- 2003	Granted
MATCHED IMPEDANCE BONDING TECHNIQUE IN HIGH-SPEED INTEGRATED CIRCUITS	United States	6646343	11-Nov- 2003	Granted
N-WAY CIRCULAR PHASE INTERPOLATOR FOR GENERATING A SIGNAL HAVING ARBITRARY PHASE	United States	6329859	11-Dec- 2001	Granted
HIGH SPEED DIFFERENTIAL SIGNAL DETECTION	United States	6727732	27-Apr- 2004	Granted
PHASED-LOCKED LOOP WITH ANALOG PHASE ROTATOR	United States	6931089	16-Aug- 2005	Granted
HIGH-SPEED BIT-PATTERN DETECTOR	United States	6792061	21-Aug- 2000	Granted
FLOATING GATE ANALOG VOLTAGE LEVEL SHIFT CIRCUIT AND METHOD	United States	7432744	07-Oct- 2008	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
FOR PRODUCING A VOLTAGE REFERENCE THAT OPERATES ON A LOW SUPPLY VOLTAGE				
BREAKDOWN DIODE STRUCTURE	United States	5448100	05-Sep- 1995	Granted
PROGRAMMABLE CHIP ENABLE LOGIC FUNCTION	United States	5303181	12-Apr- 1994	Granted
BIAS CURRENT MODULATION FOR DIFFERENTIALLY COUPLED TRANSISTOR CIRCUIT	United States	5214329	25-May- 1993	Granted
METHOD OF MAKING SILICON MESFET FOR DIELECTRICALLY ISOLATED INTEGRATED CIRCUITS	United States	5014108	07-May- 1991	Granted
METHOD OF MAKING SILICON MESFET FOR DIELECTRICALLY ISOLATED INTEGRATED CIRCUITS	United States	5306650	26-Apr- 1994	Granted
WAFER BONDING USING TRAPPED OXIDIZING VAPOR	United States	5266135	30-Nov- 1993	Granted
WAFER BONDING USING TRAPPED OXIDIZING VAPOR	United States	5334273	02-Aug- 1994	Granted
PLURAL BIT RECORDING MULTIPLIER	United States	5262976	16-Nov- 1993	Granted
RESOURCE ACCESS SECURITY SYSTEM FOR CONTROLLING ACCESS TO RESOURCES OF A DATA PROCESSING SYSTEM	United States	5469556	21-Nov- 1995	Granted
HIGH VOLTAGE PROTECTION USING SCRS	United States	5359211	25-Oct- 1994	Granted
HIGH VOLTAGE PROTECTION USING SCRS	United States	5670799	23-Sep- 1997	Granted
SELF-ALIGNED CHANNEL STOP FOR TRENCH-ISOLATED ISLAND	United States	5248894	28-Sep- 1993	Granted
SELF-ALIGNED CHANNEL STOP FOR TRENCH-ISOLATED ISLAND	United States	5436189	25-Jul-1995	Granted
TRENCH CONDUCTOR AND CROSSUNDER ARCHITECTURE	United States	5057895	15-Oct- 1991	Granted
TRENCH CONDUCTOR AND CROSSUNDER ARCHITECTURE	United States	5283461	01-Feb- 1994	Granted
DSP ADDRESS SEQUENCER	United States	5265225	23-Nov- 1993	Granted
THIN, DIELECTRICALLY ISOLATED ISLAND RESIDENT TRANSISTOR STRUCTURE HAVING LOW COLLECTOR RESISTANCE	United States	5327006	05-Jul-1994	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
BAND-GAP REFERENCE	United States	5081410	14-Jan-1992	Granted
LOW OFFSET UNITY GAIN BUFFER AMPLIFIER	United States	5218321	08-Jun- 1993	Granted
SEMICONDUCTOR STRUCTURE WITHIN DI ISLANDS HAVING BOTTOM PROJECTION FOR CONTROLLING DEVICE CHARACTERISTICS	United States	5306944	26-Apr- 1994	Granted
VOLTAGE DIVIDER AND USE AS BIAS NETWORK FOR STACKED TRANSISTORS	United States	5233289	03-Aug- 1993	Granted
VOLTAGE DIVIDER AND USE AS BIAS NETWORK FOR STACKED TRANSISTORS	United States	5493207	20-Feb- 1996	Granted
CURRENT MIRROR CIRCUIT WITH CASCODED BIPOLAR TRANSISTORS.	United States	5248932	28-Sep- 1993	Granted
METHOD AND APPARATUS FOR TESTING LEAD BONDS AND DETECTING FAILURE	United States	5085084	04-Feb- 1992	Granted
PROCESS FOR FORMING TWIN WELL CMOS INTEGRATED CIRCUITS	United States	5429958	04-Jul-1995	Granted
SOI WAFER WITH SIGE	United States	5218213	08-Jun- 1993	Granted
SOI WAFER WITH SIGE	United States	5240876	31-Aug- 1993	Granted
FAST TURN-OFF THYRISTOR STRUCTURE	United States	5086242	04-Feb- 1992	Granted
BURIED ZENER DIODE HAVING AUXILIARY ZENER JUNCTION ACCESS PATH	United States	5241213	31-Aug- 1993	Granted
RESISTOR STRUCTURE AND METHOD OF FABRICATION	United States	5200733	06-Apr- 1993	Granted
IMPROVED GRADED COLLECTOR FOR INDUCTIVE LOADS	United States	5311054	10-May- 1994	Granted
IMPROVED GRADED COLLECTOR FOR INDUCTIVE LOADS	United States	5397714	14-Mar- 1995	Granted
PUNCH THROUGH DIODES AND APPLICATIONS	United States	5929503	27-Jul-1999	Granted
PUNCH THROUGH DIODES AND APPLICATIONS	United States	5929502	27-Jul-1999	Granted
STACKED CONFIGURATION FOR INTEGRATED CIRCUITS DEVICES	United States	5117282	26-May- 1992	Granted
STACKED CONFIGURATION FOR INTEGRATED CIRCUITS DEVICES	United States	5228192	20-Jul-1993	Granted
NONCANONIC FULLY SYSTOLIC LMS ADAPTIVE ARCHITECTURE	United States	5450339	12-Sep- 1995	Granted
FOLD AND DECIMATE FILTER	United States	5258939	02-Nov-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
ARCHITECTURE			1993	
METHOD OF LASER TRIMMING	United States	5096850	17-Mar-1992	Granted
METHOD OF LASER TRIMMING	United States	5235205	10-Aug-1993	Granted
DECIMATING FILTER	United States	5206821	27-Apr-1993	Granted
DECIMATING FILTER	United States	5341335	23-Aug-1994	Granted
SEMICONDUCTOR ACCELEROMETER AND METHOD OF ITS MANUFACTURE	United States	5429993	04-Jul-1995	Granted
SEMICONDUCTOR ACCELEROMETER AND METHOD OF ITS MANUFACTURE	United States	5656512	12-Aug-1997	Granted
QUADRATURE FILTER WITH REAL CONVERSION	United States	5515402	07-May-1996	Granted
TELEPHONE SUBSCRIBER LINE CIRCUIT, COMPONENTS AND METHODS	United States	5745563	28-Apr-1998	Granted
POWER DRIVER CIRCUIT	United States	5504449	02-Apr-1996	Granted
STATIC ELECTRICITY DISPERSANT	United States	5289336	22-Feb-1994	Granted
BIASING OF ISLAND-SURROUNDING MATERIAL TO SUPPRESS REDUCTION OF BREAKDOWN VOLTAGE DUE TO FIELD PLATE ACTING ON BURIED LAYER/ISLAND JUNCTION BETWEEN HIGH AND LOW IMPURITY CONCENTRATION REGIONS	United States	5744851	28-Apr-1998	Granted
BIASING OF ISLAND-SURROUNDING MATERIAL TO SUPPRESS REDUCTION OF BREAKDOWN VOLTAGE DUE TO FIELD PLATE ACTING ON BURIED LAYER/ISLAND JUNCTION BETWEEN HIGH AND LOW IMPURITY CONCENTRATION REGIONS	United States	6184565	06-Feb-2001	Granted
METHOD AND DEVICE IN WHICH BOTTOMING A WELL IN A DIELECTRICALLY ISOLATED ISLAND IS ASSURED	United States	5270569	14-Dec-1993	Granted
METHOD AND DEVICE IN WHICH BOTTOMING A WELL IN A DIELECTRICALLY ISOLATED ISLAND IS ASSURED	United States	5438221	01-Aug-1995	Granted
METHOD AND DEVICE IN WHICH	United States	5602054	11-Feb-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
BOTTOMING A WELL IN A DIELECTRICALLY ISOLATED ISLAND IS ASSURED			1997	
PRINT BAND CLEANER	United States	5220868	22-Jun-1993	Granted
NEGATIVE BIASING OF ISOLATION TRENCH FILL TO ATTRACT MOBILE POSITIVE IONS AWAY FROM BIPOLAR DEVICE REGIONS	United States	6051474	18-Apr-2000	Granted
BONDED WAFER PROCESSING	United States	5780311	14-Jul-1998	Granted
BONDED WAFER PROCESSING	United States	5801084	01-Sep-1998	Granted
SYMMETRIC, HIGH SPEED, VOLTAGE SWITCHING CIRCUIT POSSESSING REVERSE VOLTAGE APPLICATION IMMUNITY	United States	5302859	12-Apr-1994	Granted
DIFFERENTIAL VOLTAGE FOLLOWER	United States	5382916	17-Jan-1995	Granted
DIFFERENTIAL VOLTAGE FOLLOWER	United States	5471131	28-Nov-1995	Granted
ANALOG-TO-DIGITAL CONVERTER AND METHOD OF FABRICATION	United States	5369309	29-Nov-1994	Granted
ANALOG-TO-DIGITAL CONVERTER AND METHOD OF FABRICATION	United States	5631599	20-May-1997	Granted
ANALOG-TO-DIGITAL CONVERTER AND METHOD OF FABRICATION	United States	5659261	19-Aug-1997	Granted
ANALOG-TO-DIGITAL CONVERTER AND METHOD OF FABRICATION	United States	5682111	28-Oct-1997	Granted
ANALOG-TO-DIGITAL CONVERTER AND METHOD OF FABRICATION	United States	5994755	30-Nov-1999	Granted
ANALOG-TO-DIGITAL CONVERTER AND METHOD OF FABRICATION	United States	6329260	11-Dec-2001	Granted
ANALOG-TO-DIGITAL CONVERTER	United States	5481129	02-Jan-1996	Granted
BICMOS DEVICES	United States	5851864	22-Dec-1998	Granted
BICMOS DEVICES	United States	5856695	05-Jan-1999	Granted
HI SPEED BIPOLAR DIGITAL LOGIC GATE ARCHITECTURE	United States	5229661	20-Jul-1993	Granted
SILICON ON DIAMOND CIRCUIT STRUCTURE	United States	5561303	01-Oct-1996	Granted
METHOD OF FORMING ISLAND WITH POLYSILICON-FILLED TRENCH ISOLATION	United States	5217919	08-Jun-1993	Granted
PRECISION VOLTAGE REFERENCE CIRCUIT	United States	5300877	05-Apr-1994	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
REDUCED SEMICONDUCTOR SIZE PACKAGE	United States	5434357	18-Jul-1995	Granted
SELECTIVE RECRYSTALLIZATION TO REDUCE P-CHANNEL TRANSISTOR LEAKAGE IN SILICON-ON-SAPPHIRE CMOS RADIATION HARDENED IC's.	United States	5298434	29-Mar-1994	Granted
SELECTIVE RECRYSTALLIZATION TO REDUCE P-CHANNEL TRANSISTOR LEAKAGE IN SILICON-ON-SAPPHIRE CMOS RADIATION HARDENED IC's.	United States	5391903	21-Feb-1995	Granted
SINE/COSINE GENERATOR AND METHOD	United States	5276633	04-Jan-1994	Granted
SINE/COSINE GENERATOR AND METHOD	United States	RE36388	09-Nov-1999	Granted
DIGITAL DOWN CONVERTER AND METHOD	United States	5493581	20-Feb-1996	Granted
DIGITAL DOWN CONVERTER AND METHOD	United States	5570392	29-Oct-1996	Granted
DIGITAL DOWN CONVERTER AND METHOD	United States	5617344	01-Apr-1997	Granted
DIGITAL DOWN CONVERTER AND METHOD	United States	5633815	27-May-1997	Granted
DIGITAL DOWN CONVERTER AND METHOD	United States	5757794	26-May-1998	Granted
FORMATION OF DUAL POLARITY SOURCE/DRAIN EXTENSIONS IN LATERAL COMPLEMENTARY CHANNEL MOS ARCHITECTURES	United States	5338960	16-Aug-1994	Granted
INTEGRATION OF HIGH VOLTAGE LATERAL CMOS DEVICES IN LOW VOLTAGE MOS ARCHITECTURE USING CMOS COMPATIBLE PROCESS STEPS	United States	5322804	21-Jun-1994	Granted
INTEGRATION OF HIGH VOLTAGE LATERAL CMOS DEVICES IN LOW VOLTAGE MOS ARCHITECTURE USING CMOS COMPATIBLE PROCESS STEPS	United States	5541435	30-Jul-1996	Granted
INTEGRATION OF HIGH VOLTAGE LATERAL CMOS DEVICES IN LOW VOLTAGE MOS ARCHITECTURE USING CMOS COMPATIBLE PROCESS STEPS	United States	5622878	22-Apr-1997	Granted
INTEGRATION OF HIGH VOLTAGE LATERAL CMOS DEVICES IN LOW VOLTAGE MOS ARCHITECTURE USING CMOS COMPATIBLE PROCESS STEPS	United States	5650658	22-Jul-1997	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
A DIGITAL DECIMATING FILTER WITH VIRTUAL REGISTER SPACE AND VARIABLE DECIMATION RATES	United States	5455782	03-Oct- 1995	Granted
SOI CMOS DEVICE HAVING DIFFERENTIALLY DOPED BODY EXTENSION FOR PROVIDING IMPROVED BACKSIDE LEAKAGE CHANNEL STOP	United States	5293052	08-Mar- 1994	Granted
SEMICONDUCTOR ROM DEVICE AND METHOD	United States	5440506	08-Aug- 1995	Granted
SEMICONDUCTOR ROM DEVICE AND METHOD	United States	5544095	06-Aug- 1996	Granted
SEMICONDUCTOR ROM DEVICE AND METHOD	United States	5563834	08-Oct- 1996	Granted
SEMICONDUCTOR ROM DEVICE AND METHOD	United States	5586072	17-Dec- 1996	Granted
SEMICONDUCTOR ROM DEVICE AND METHOD	United States	5650971	22-Jul-1997	Granted
REDUCTION OF BIPOLAR GAIN AND IMPROVEMENT IN SNAP BACK SUSTAINING VOLTAGE IN SOI FIELD EFFECT TRANSISTOR	United States	5315144	24-May- 1994	Granted
STRESS RELIEF TECHNIQUE OF REMOVING OXIDE FROM SURFACE OF TRENCH-PATTERNED SEMICONDUCTOR-ON-INSULATOR STRUCTURE	United States	5270265	14-Dec- 1993	Granted
HALF BAND FILTER AND METHOD	United States	5548542	20-Aug- 1996	Granted
HALF BAND FILTER AND METHOD	United States	5574671	12-Nov- 1996	Granted
REDUCED TEMPERATURE SUPPRESSION OF VOLATILIZATION OF PHOTOEXCITED HALOGEN REACT PRODUCTS FROM SILICON WAFER	United States	5352327	04-Oct- 1994	Granted
DECOUPLING TOOL MECHANISM FOR ELECTRICAL CONNECTORS	United States	5312262	17-May- 1994	Granted
SEU-IMMUNE LATCH FOR GATE ARRAY STANDARD CELL AND OTHER ASIC APPLICATIONS	United States	5311070	10-May- 1994	Granted
METHOD FOR FORMING RECESSED OXIDE ISOLATION CONTAINING DEEP AND SHALLOW TRENCHES	United States	5382541	17-Jan-1995	Granted
METHOD FOR FORMING RECESSED	United States	5504033	02-Apr-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
OXIDE ISOLATION CONTAINING DEEP AND SHALLOW TRENCHES			1996	
GAS PHASE CHEMICAL REDUCTION OF METALLIC BRANDING LAYER OF ELECTRONIC CIRCUIT PACKAGE FOR DEPOSITION OF BRANDING INK	United States	5279850	18-Jan-1994	Granted
BONDED WAFER PROCESSING	United States	5362667	08-Nov- 1994	Granted
BONDED WAFER PROCESSING	United States	5517047	14-May- 1996	Granted
BONDED WAFER PROCESSING	United States	5728624	17-Mar- 1998	Granted
CURING OF A TUNGSTEN FILAMENT IN AN ION IMPLANTER	United States	5370568	06-Dec- 1994	Granted
ELECTROSTATIC DISCHARGE PROTECTION	United States	5416351	16-May- 1995	Granted
SILICON GLASS-BONDED WAFERS	United States	5729038	17-Mar- 1998	Granted
SILICON GLASS-BONDED WAFERS	United States	5994204	30-Nov- 1999	Granted
BONDED WAFER PROCESSING WITH METAL SILICIDATION	United States	5387555	07-Feb- 1995	Granted
BONDED WAFER PROCESSING WITH METAL SILICIDATION	United States	5569620	29-Oct- 1996	Granted
BONDED WAFER PROCESSING WITH METAL SILICIDATION	United States	6909146	21-Jun- 2005	Granted
BONDED WAFER PROCESSING WITH OXIDATIVE BONDING	United States	5849627	15-Dec- 1998	Granted
TRENCH ISOLATION STRESS RELIEF	United States	5448102	05-Sep- 1995	Granted
TRENCH ISOLATION STRESS RELIEF	United States	5683075	04-Nov- 1997	Granted
BONDED WAFER PROCESS INCORPORATING DIAMOND INSULATOR	United States	5272104	21-Dec- 1993	Granted
BONDED WAFER PROCESS INCORPORATING DIAMOND INSULATOR	United States	5650639	22-Jul-1997	Granted
CURRENT DRIVER HAVING VOLTAGE TRANSITION FAILURE-BASED SHORT CIRCUIT PROTECTION CIRCUIT	United States	5428492	27-Jun- 1995	Granted
RATE CHANGE FILTER AND METHOD	United States	5717617	10-Feb- 1998	Granted
DIE SEPARATION METHOD FOR	United States	5552345	03-Sep-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SILICON ON DIAMOND CIRCUIT STRUCTURES			1996	
INTEGRATED CIRCUIT WITH IMPROVED REVERSE BIAS BREAKDOWN	United States	5373183	13-Dec- 1994	Granted
SEMICONDUCTOR DEVICE WITH INCREASED MAXIMUM TERMINAL VOLTAGE	United States	5665634	09-Sep- 1997	Granted
SEMICONDUCTOR DEVICE WITH INCREASED MAXIMUM TERMINAL VOLTAGE	United States	6008512	28-Dec- 1999	Granted
LATE PROCESS METHOD AND APPARATUS FOR TRENCH ISOLATION	United States	5872044	16-Feb- 1999	Granted
LATE PROCESS METHOD AND APPARATUS FOR TRENCH ISOLATION	United States	5920108	06-Jul-1999	Granted
ANALOG-TO-DIGITAL CONVERTER AND METHOD	United States	5345236	06-Sep- 1994	Granted
METHOD OF MAKING INTEGRATED CIRCUIT STRUCTURE WITH NARROW LINE WIDTHS	United States	5639688	17-Jun- 1997	Granted
METHOD OF MAKING INTEGRATED CIRCUIT STRUCTURE WITH NARROW LINE WIDTHS	United States	5773891	30-Jun- 1998	Granted
SUBMICRON BONDED SOI BY TRENCH PLANARIZATION	United States	5585661	17-Dec- 1996	Granted
FAST CHARGING MOS CAPACITOR STRUCTURE FOR HIGH MAGNITUDE VOLTAGE OF EITHER POSITIVE OR NEGATIVE POLARITY	United States	5341009	23-Aug- 1994	Granted
DIAMOND INSULATOR DEVICES AND METHOD OF FABRICATION	United States	5683939	04-Nov- 1997	Granted
CIRCUIT AND METHOD FOR EXTENDING THE SAFE OPERATING AREA OF A BJT	United States	5357089	18-Oct- 1994	Granted
METHOD OF MANUFACTURE OF MULTI-CELL INTEGRATED CIRCUIT ARCHITECTURE	United States	5561607	01-Oct- 1996	Granted
HIGH SPEED COMPARATOR	United States	5541538	30-Jul-1996	Granted
METHODS FOR FORMING A TRANSISTOR HAVING AN EMITTER WITH ENHANCED EFFICIENCY	United States	5395774	07-Mar- 1995	Granted
MAGNETIC BOATS	United States	5669599	23-Sep- 1997	Granted
METHOD FOR INTERACTIVELY	United States	5581475	03-Dec-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
TAILORING TOPOGRAPHY OF INTEGRATED CIRCUIT LAYOUT IN ACCORDANCE WITH ELECTROMIGRATION MODEL-BASED MINIMUM WIDTH METAL AND CONTACT/VIA RULES			1996	
GRAPHICAL DISPLAY DISCRIMINANT FACTOR INDICATOR FOR ANOMALY IDENTIFICATION IN SEMICONDUCTOR MANUFACTURE BATCH PROCESS	United States	5450326	12-Sep- 1995	Granted
FILL & ETCHBACK PROCESS USING DUAL PHOTORESIST SACRIFICIAL LAYER & TWO-STEP ETCHING PROCESS FOR PLANARIZING OXIDE-FILLED SHALLOW TRENCH STRUCTURE	United States	5516625	14-May- 1996	Granted
ESD PROTECTION USING SCR CLAMPING	United States	5574618	12-Nov- 1996	Granted
LOW VOLTAGE RF AMPLIFIER AND MIXER WITH SINGLE BIAS BLOCK AND METHOD	United States	5809410	15-Sep- 1998	Granted
LOW VOLTAGE RF AMPLIFIER AND MIXER WITH SINGLE BIAS BLOCK AND METHOD	United States	6018270	25-Jan-2000	Granted
METHOD FOR PROVIDING A SILICON AND DIAMOND SUBSTRATE HAVING A CARBON TO SILICON TRANSITION LAYER AND APPARATUS THEREOF	United States	5526768	18-Jun- 1996	Granted
METHOD FOR PROVIDING A SILICON AND DIAMOND SUBSTRATE HAVING A CARBON TO SILICON TRANSITION LAYER AND APPARATUS THEREOF	United States	5782975	21-Jul-1998	Granted
RESISTANCE-MEASUREMENT BASED ARRANGEMENT FOR MONITORING INTEGRITY OF TRAVEL PATH GROUND LINK IN ELECTRONIC COMPONENT HANDLING APPARATUS	United States	5576695	19-Nov- 1996	Granted
TRENCH RESISTOR ARCHITECTURE	United States	5466963	14-Nov- 1995	Granted
STRUCTURE AND TECHNIQUE FOR TAILORING EFFECTIVE RESISTIVITY OF A SIPOS LAYER BY PATTERNING AND CONTROL OF DOPANT INTRODUCTION	United States	5637908	10-Jun- 1997	Granted
VOLTAGE INDEPENDENT SYMMETRICAL CURRENT SOURCE	United States	5446368	29-Aug- 1995	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
WITH CROSS-COUPLED TRANSISTORS				
METHOD OF FABRICATION OF SURFACE MOUNTABLE INTEGRATED CIRCUITS	United States	5618752	08-Apr- 1997	Granted
PLASMA CLEANING METHOD FOR IMPROVED INK BRAND PERMANENCY ON IC PACKAGES WITH METALLIC PARTS	United States	5451263	19-Sep- 1995	Granted
PLASMA CLEANING METHOD FOR IMPROVED INK BRAND PERMANENCY ON IC PACKAGES WITH METALLIC PARTS	United States	5882423	16-Mar- 1999	Granted
PROGRAMMABLE ELEMENT IN BARRIER METAL DEVICE AND METHOD	United States	5648678	15-Jul-1997	Granted
DIGITAL COMPONENT TESTING APPARATUS AND METHOD	United States	5644309	01-Jul-1997	Granted
JFET STRUCTURES FOR SEMICONDUCTOR DEVICES WITH COMPLEMENTARY BIPOLAR TRANSISTORS & METHOD	United States	5652153	29-Jul-1997	Granted
CMOS INTEGRATED CIRCUIT ARCHITECTURE INCORPORATION DEEP IMPLANTED EMITTER REGION TO FORM AUXILIARY BIPOLAR TRANSISTOR	United States	6350640	26-Feb- 2002	Granted
SCR-INDUCTOR TRANSIENT CLAMP	United States	5546038	13-Aug- 1996	Granted
PROCESS FOR MANUFACTURING A MULTI-PORT ADHESIVE DISPENSING TOOL	United States	5423889	13-Jun- 1995	Granted
DIGITAL BASEBAND TO IF CONVERSION IN CELLULAR BASE STATIONS	United States	5519732	21-May- 1996	Granted
METHOD OF MAKING CONTACT REGIONS FOR NARROW TRENCHES IN SEMICONDUCTOR DEVICES	United States	5622890	22-Apr- 1997	Granted
METHOD OF MAKING CONTACT REGIONS FOR NARROW TRENCHES IN SEMICONDUCTOR DEVICES	United States	5962908	05-Oct- 1999	Granted
VIDEO SCALING METHOD AND DEVICE	United States	5574572	12-Nov- 1996	Granted
HIGH SPEED A/D CONVERTER AND SLEW CONTROLLED PULSE DETECTOR	United States	5808489	15-Sep- 1998	Granted
MULTISTANDARD DECODER FOR	United States	5621478	15-Apr-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
VIDEO SIGNALS AND VIDEO SIGNAL DECODING METHOD			1997	
SAMPLE RATE CONVERTER AND SAMPLE RATE CONVERSION METHOD	United States	5619270	08-Apr- 1997	Granted
DIGITAL DECODER AND METHOD FOR DECODING COMPOSITE VIDEO SIGNALS	United States	5621477	15-Apr- 1997	Granted
METHOD OF FORMING P-TYPE ISLANDS OVER P-TYPE BURIED LAYER	United States	5633180	27-May- 1997	Granted
IMPEDANCE SETTING CIRCUIT FOR A SLIC	United States	5515434	07-May- 1996	Granted
CAPACITOR STRUCTURE IN A BONDED WAFER AND METHOD OF FABRICATION	United States	5841182	24-Nov- 1998	Granted
GROUND KEY DETECTOR FOR A SLIC	United States	5515417	07-May- 1996	Granted
CURRENT FOLLOWER WITH ZERO INPUT IMPEDANCE	United States	5614867	25-Mar- 1997	Granted
AN INTEGRATED RINGER RELAY CIRCUIT AND METHOD	United States	5517565	14-May- 1996	Granted
ZERO PHASE ERROR SWITCHED- CAPACITOR PHASE LOCKED LOOP FILTER	United States	5659269	19-Aug- 1997	Granted
TEMPERATURE INSENSITIVE FILTER TUNING NETWORK AND METHOD	United States	5572161	05-Nov- 1996	Granted
METHOD OF FORMING DUMMY ISLAND CAPACITOR	United States	5602052	11-Feb- 1997	Granted

Intersil Americas, Inc. – Foreign Registered Patents and Pending Applications

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
MULTI-PHASE CONVERTER WITH BALANCED CURRENTS	TW	I232630	11-May- 2005	Granted
THERMAL COMPENSATED CURRENT SENSING OF INTRINSIC POWER CONVERTER ELEMENTS	CN	100352154C	28-Nov- 2007	Granted
THERMAL COMPENSATED CURRENT SENSING OF INTRINSIC POWER CONVERTER ELEMENTS	KR	10-0578908	04-May- 2006	Granted
THERMAL COMPENSATED CURRENT SENSING OF INTRINSIC POWER CONVERTER ELEMENTS	TW	NI-197515	01-Mar- 2004	Granted
ADJUSTABLE INTEGRATED THERMAL	CN	CN100336289	05-Sep-	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
COMPENSATION METHOD FOR ELECTRONIC CIRCUITS UTILIZING TEMPERATURE-DEPENDENT SENSING ELEMENTS			2007	
ADJUSTABLE INTEGRATED THERMAL COMPENSATION METHOD FOR ELECTRONIC CIRCUITS UTILIZING TEMPERATURE-DEPENDENT SENSING ELEMENTS	TW	NI-196063	11-Feb-2004	Granted
DC-TO-DC CONVERTER WITH FAST OVERRIDE FEEDBACK CONTROL AND ASSOCIATED METHODS	TW	I282916	21-Jun-2007	Granted
DC-TO-DC CONVERTER WITH FAST OVERRIDE FEEDBACK CONTROL AND ASSOCIATED METHODS	CN	ZL 03107235	03-Jun-2009	Granted
PROGRAMMABLE CURRENT-SENSING CIRCUIT PROVIDING CONTINUOUS TEMPERATURE COMPENSATION FOR DC-DC CONVERTER	CN	ZL02825006.	23-Jul-2008	Granted
PROGRAMMABLE CURRENT-SENSING CIRCUIT PROVIDING CONTINUOUS TEMPERATURE COMPENSATION FOR DC-DC CONVERTER	TW	I232022	01-May-2005	Granted
DISCRETE STEP TEMPERATURE COMPENSATED CURRENT SENSING TECHNIQUE FOR DC TO DC	TW	I232021	01-May-2005	Granted
EFFICIENT BUCK TOPOLOGY DC-DC POWER STAGE UTILIZING MONOLITHIC N-CHANNEL UPPER FET AND PILOT CURRENT SENSING	TW	I236205	11-Jul-2005	Granted
METHOD OF SETTING BI-DIRECTIONAL OFFSET IN A PWM CONTROLLER USING A SINGLE PIN	CN	CN100428614	22-Oct-2008	Granted
METHOD OF SETTING BI-DIRECTIONAL OFFSET IN A PWM CONTROLLER USING A SINGLE PIN	TW	I221052	11-Sep-2004	Granted
PWM CONTROLLER WITH INTEGRATED PLL	TW	I257542	01-Jul-2006	Granted
LI-ION/LI-POLYMER BATTERY CHARGER CONFIGURED TO BE DC-POWERED FROM MULTIPLE TYPES OF WALL ADAPTERS	KR	723989	25-May-2007	Granted
LI-ION/LI-POLYMER BATTERY CHARGER CONFIGURED TO BE DC-POWERED FROM MULTIPLE TYPES OF WALL ADAPTERS	CN	0380105133*	08-Oct-2008	Granted
LI-ION/LI-POLYMER BATTERY CHARGER CONFIGURED TO BE DC-POWERED FROM MULTIPLE TYPES OF WALL ADAPTERS	TW	I234330	11-Jun-2005	Granted
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	CN	100422897C	01-Oct-2008	Granted
SYNCHRONIZATION OF MULTIPHASE	JP	3981110	06-Jul-2007	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SYNTHETIC RIPPLE VOLTAGE REGULATOR				
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	CN	*0410083437	23-Feb- 2007	Granted
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	KR	10-0716125	02-May- 2007	Granted
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	TW	I269133	21-Dec- 2006	Granted
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	TW	I269134	21-Dec- 2006	Granted
MULTIPHASE CONVERTER CONTROLLER USING SINGLE GAIN RESISTOR	TW	I321390	01-Mar- 2010	Granted
MULTIPHASE CONVERTER CONTROLLER USING SINGLE GAIN RESISTOR	CN	*0380110117	11-Jun- 2008	Granted
PWM-BASED DC-DC CONVERTER WITH ASSURED DEAD TIME CONTROL EXHIBITING NO SHOTT-THROUGH CURRENT AND INDEPENDENT OF TYPE OF FET USED	TW	I229970	21-Mar- 2005	Granted
PWM-BASED DC-DC CONVERTER WITH ASSURED DEAD TIME CONTROL EXHIBITING NO SHOTT-THROUGH CURRENT AND INDEPENDENT OF TYPE OF FET USED	CN	100492829C	27-May- 2009	Granted
MECHANISM FOR PROVIDING OVER- VOLTAGE PROTECTION DURING POWER UP OF DC-DC CONVERTER	TW	I291281	11-Dec- 2007	Granted
LOW POWER, AREA-EFFICIENT CIRCUIT TO PROVIDE CLOCK SYNCHRONIZATION	TW	I294219	01-Mar- 2008	Granted
OPTICAL PICK-UP UNITS AND LASER DRIVERS WITH INCREASED FUNCTIONALITY	CN	4431571	25-Dec- 2009	Granted
MULTIPHASE CONVERTER WITH ZERO VOLTAGE SWITCHING	CN	0510005928.	17-Jun- 2009	Granted
DC-TO-DC POWER REGULATOR HAVING NON-LINEAR LOAD LINE AND AUTOMATIC LEAKAGE CURRENT OFFSET ADJUSTMENT	TW	I180468	01-May- 2007	Granted
DC-TO-DC POWER REGULATOR HAVING NON-LINEAR LOAD LINE AND AUTOMATIC LEAKAGE CURRENT OFFSET ADJUSTMENT	CN	100437413C	26-Nov- 2008	Granted
ACTIVE AREA BONDING COMPATIBLE HIGH CURRENT STRUCTURES	TW	I293186	01-Feb- 2008	Granted
ASSYMETRICAL MULTIPHASE DC-DC POWER CONVERTER	CN	CN100382417	16-Apr- 2008	Granted
ASSYMETRICAL MULTIPHASE DC-DC POWER CONVERTER	TW	I275234	01-Mar- 2007	Granted
MULTIPLEXED HIGH VOLTAGE DC-AC DRIVER	CN	CN100502219	17-Jun- 2009	Granted
MULTIPLEXED HIGH VOLTAGE DC-AC DRIVER	KR	10-619636	28-Aug- 2006	Granted
MULTIPLEXED HIGH VOLTAGE DC-AC DRIVER	TW	I275236	01-Mar- 2007	Granted

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CASCADABLE CURRENT-MODE REGULATOR	TW	I274975	01-Mar-2007	Granted
CASCADABLE CURRENT-MODE REGULATOR	CN	100438293C	26-Nov-2008	Granted
CLOCKED, CASCADING, CURRENT-MODE REGULATOR WITH HIGH NOISE IMMUNITY AND ARBITRARY PHASE COUNT	CN	100397280C	25-Jun-2008	Granted
CLOCKED, CASCADING, CURRENT-MODE REGULATOR WITH HIGH NOISE IMMUNITY AND ARBITRARY PHASE COUNT	TW	I281771	21-May-2007	Granted
TRACKING SOFT START CIRCUIT FOR GENERATING A PLURALITY OF SOFT START VOLTAGES WHERE ALL SOFT START VOLTAGES ARE PREVENTED UNTIL ALL HAVE BEEN BROUGHT TO THE SAME PRESCRIBED STATE OF OPERATION	TW	I244822	01-Dec-2005	Granted
TRACKING SOFT START CIRCUIT FOR GENERATING A PLURALITY OF SOFT START VOLTAGES WHERE ALL SOFT START VOLTAGES ARE PREVENTED UNTIL ALL HAVE BEEN BROUGHT TO THE SAME PRESCRIBED STATE OF OPERATION	CN	CN100468284	11-Mar-2009	Granted
SYSTEM AND METHOD OF DETECTING PHASE BODY DIODE USING A COMPARATOR IN A SYNCHRONOUS RECTIFIED FET DRIVER	TW	I289005	21-Oct-2007	Granted
SYSTEM AND METHOD OF DETECTING PHASE BODY DIODE USING A COMPARATOR IN A SYNCHRONOUS RECTIFIED FET DRIVER	CN	0410102013	23-Jul-2008	Granted
PRECISION MARGINING CIRCUITRY	TW	I275918	11-Mar-2007	Granted
PRECISION MARGINING CIRCUITRY	CN	10097455.6	11-Jun-2008	Granted
LINEAR PREDICTIVE CONTROLLER	CN	ZL100565085	19-Aug-2009	Granted
STARTUP CIRCUIT FOR CONVERTER WITH PRE-BIASED LOAD	CN	CN100466432	04-Mar-2009	Granted
DROOP AMPLIFIER CIRCUIT	KR	881537	23-Jan-2009	Granted
DROOP AMPLIFIER CIRCUIT	JP	4366422	28-Aug-2009	Granted
DROOP AMPLIFIER CIRCUIT	CN	0580007693	16-Jul-2008	Granted
CONTROLLER AND DRIVER ARCHITECTURE FOR DOUBLE- ENDED CIRCUITRY FOR POWERING COLD CATHODE FLUORESCENT LAMPS	KR	773176	29-Oct-2007	Granted
CONTROLLER AND DRIVER ARCHITECTURE	TW	I280536	01-May-	Granted

Title	Jurisdiction	Reg. No/ Serial No.	Filing Date / Reg. Date	Status
FOR DOUBLE- ENDED CIRCUITRY FOR POWERING COLD CATHODE FLUORESCENT LAMPS			2007	
APPARATUS AND METHOD FOR SLIDING-MODE CONTROL IN A MULTIPHASE SWITCHING POWER SUPPLY	CN	10084513	25-Mar-2009	Granted
APPARATUS AND METHOD FOR FIXED-FREQUENCY CONTROL IN A SWITCHING POWER SUPPLY	CN	0510084514.	01-Jul-2005	Granted
APPARATUS AND METHOD FOR TRANSIENT CONTROL IN A MULTIPHASE SWITCHING POWER SUPPLY	CN	10084515	29-Jul-2009	Granted
PHASE SHIFT MODULATION-BASED CONTROL OF AMPLITUDE OF AC VOLTAGE OUTPUT PRODUCED BY DOUBLE-ENDED DC-AC CONVERTER CIRCUITRY FOR POWERING HIGH VOLTAGE LOAD SUCH AS COLD CATHODE FLUORESCENT LAMP	TW	I306359	11-Feb-2009	Granted
PHASE SHIFT MODULATION-BASED CONTROL OF AMPLITUDE OF AC VOLTAGE OUTPUT PRODUCED BY DOUBLE-ENDED DC-AC CONVERTER CIRCUITRY FOR POWERING HIGH VOLTAGE LOAD SUCH AS COLD CATHODE FLUORESCENT LAMP	CN	CN100454745	21-Jan-2009	Granted
PHASE SHIFT MODULATION-BASED CONTROL OF AMPLITUDE OF AC VOLTAGE OUTPUT PRODUCED BY DOUBLE-ENDED DC-AC CONVERTER CIRCUITRY FOR POWERING HIGH VOLTAGE LOAD SUCH AS COLD CATHODE FLUORESCENT LAMP	KR	712448	23-Apr-2007	Granted
CURRENT AVERAGING CIRCUIT FOR A PWM POWER CONVERTER	CN	CN100432883	12-Nov-2008	Granted
CURRENT AVERAGING CIRCUIT FOR A PWM POWER CONVERTER	TW	I257200	21-Jun-2006	Granted
FLOATING GATE ANALOG VOLTAGE LEVEL SHIFT CIRCUIT AND METHOD FOR PRODUCING A VOLTAGE REFERENCE THAT OPERATES ON A LOW SUPPLY VOLTAGE	CN	ZL10092242	11-Mar-2009	Granted
DC-AC CONVERTER HAVING PHASE-MODULATED, DOUBLE-ENDED, HALF-BRIDGE TOPOLOGY FOR POWERING HIGH VOLTAGE LOAD SUCH AS COLD CATHODE FLUORESCENT LAMP	KR	73965	25-May-2007	Granted
REFERENCE VOLTAGE GENERATOR FOR USE IN DISPLAY APPLICATIONS	CN	0610055035	05-Aug-2009	Granted
REFERENCE VOLTAGE GENERATOR FOR USE IN DISPLAY APPLICATIONS	KR	10-0863638	08-Oct-2008	Granted
PWM CONTROLLER WITH DUAL-EDGE MODULATION USING DUAL RAMPS	TW	I301701	01-Oct-2008	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
PWM CONTROLLER WITH DUAL-EDGE MODULATION USING DUAL RAMPS	CN	CN100466434	04-Mar-2009	Granted
ADAPTIVE PWM PULSE POSITION FOR FAST TRANSIENT RESPONSE	CN	100499330C.	10-Jun-2009	Granted
ACTIVE DROOP CURRENT SHARING	DE	20200900985	24-Dec-2009	Granted
ADDING AND DROPPING PHASES IN CURRENT SHARING	DE	009855.9	24-Dec-2009	Granted
INTELLIGENT MANAGEMENT OF CURRENT SHARING GROUP	DE	22009009854	24-Dec-2009	Granted
THERMAL COMPENSATED CURRENT SENSING OF INTRINSIC POWER CONVERTER ELEMENTS	EP	02-757255.1	19-Feb-2004	Pending
THERMAL COMPENSATED CURRENT SENSING OF INTRINSIC POWER CONVERTER ELEMENTS	JP	03-522248	05-Mar-2004	Published
THERMAL COMPENSATED CURRENT SENSING OF INTRINSIC POWER CONVERTER ELEMENTS	CN	10180340.7	17-Oct-2007	Published
ADJUSTABLE INTEGRATED THERMAL COMPENSATION METHOD FOR ELECTRONIC CIRCUITS UTILIZING TEMPERATURE-DEPENDENT SENSING ELEMENTS	WO	US02/26355	20-Aug-2002	Published
ADJUSTABLE INTEGRATED THERMAL COMPENSATION METHOD FOR ELECTRONIC CIRCUITS UTILIZING TEMPERATURE-DEPENDENT SENSING ELEMENTS	JP	03-522247	17-Feb-2004	Published
ADJUSTABLE INTEGRATED THERMAL COMPENSATION METHOD FOR ELECTRONIC CIRCUITS UTILIZING TEMPERATURE-DEPENDENT SENSING ELEMENTS	EP	02759402	19-Feb-2004	Pending
ADJUSTABLE INTEGRATED THERMAL COMPENSATION METHOD FOR ELECTRONIC CIRCUITS UTILIZING TEMPERATURE-DEPENDENT SENSING ELEMENTS	KR	04-7002460	20-Feb-2004	Pending
PROGRAMMABLE CURRENT-SENSING CIRCUIT PROVIDING CONTINUOUS TEMPERATURE COMPENSATION FOR DC-DC CONVERTER	DE	10297493.4	28-May-2004	Pending
PROGRAMMABLE CURRENT-SENSING CIRCUIT PROVIDING CONTINUOUS TEMPERATURE COMPENSATION FOR DC-DC CONVERTER	CN	200810125920	05-Jun-2008	Pending
METHOD OF SETTING BI-DIRECTIONAL	WO	03/35893	12-Nov-	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
OFFSET IN A PWM CONTROLLER USING A SINGLE PIN			2003	
PWM CONTROLLER WITH INTEGRATED PLL	KR	05-7005825	04-Apr-2005	Pending
PWM CONTROLLER WITH INTEGRATED PLL	JP	2004-543104	04-Apr-2005	Published
PWM CONTROLLER WITH INTEGRATED PLL	CN	80103120.4	09-May-2005	Pending
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	KR	2004-75133	20-Sep-2004	Pending
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	EP	04 023 197.9	29-Sep-2004	Pending
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	JP	2004-285516	29-Sep-2004	Pending
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	EP	04023198.7	29-Sep-2004	Pending
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	DE	04 023 197.9	29-Sep-2004	Pending
SYNCHRONIZATION OF MULTIPHASE SYNTHETIC RIPPLE VOLTAGE REGULATOR	DE	04023198.7	29-Sep-2004	Pending
MECHANISM FOR PROVIDING OVER-VOLTAGE PROTECTION DURING POWER UP OF DC-DC CONVERTER	CN	03-80107760.2	12-Dec-2003	Published
LOW POWER, AREA-EFFICIENT CIRCUIT TO PROVIDE CLOCK SYNCHRONIZATION	WO	04/03965	11-Feb-2004	Published
OPTICAL PICK-UP UNITS AND LASER DRIVERS WITH INCREASED FUNCTIONALITY	JP	2006-507089	11-Mar-2004	Pending
OPTICAL PICK-UP UNITS AND LASER DRIVERS WITH INCREASED FUNCTIONALITY	TW	93106463	11-Mar-2004	Pending
MULTIPHASE CONVERTER WITH ZERO VOLTAGE SWITCHING	TW	93135949	23-Nov-2004	Published
ACTIVE AREA BONDING COMPATIBLE HIGH CURRENT STRUCTURES	WO	04/23307	20-Jul-2004	Pending
ACTIVE AREA BONDING COMPATIBLE HIGH CURRENT STRUCTURES	KR	06-7003594	20-Jul-2004	Pending
ACTIVE AREA BONDING COMPATIBLE HIGH CURRENT STRUCTURES	EP	04778684.3	20-Jul-2004	Pending
ACTIVE AREA BONDING COMPATIBLE HIGH CURRENT STRUCTURES	CN	200410095946	20-Aug-2004	Published
ACTIVE AREA BONDING COMPATIBLE HIGH CURRENT STRUCTURES	JP	06-523849	21-Feb-2006	Pending
MULTIPLE CHANNEL PROGRAMMABLE GAMMA CORRECTION VOLTAGE GENERATOR	TW	93123071	02-Aug-2004	Pending
MULTIPLEXED HIGH VOLTAGE DC-AC DRIVER	JP	330976	15-Nov-2004	Pending
STARTUP CIRCUIT FOR A DC-DC CONVERTER	TW	93127999	16-Sep-2004	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
TRACKING SOFT START CIRCUIT FOR GENERATING A PLURALITY OF SOFT START VOLTAGES WHERE ALL SOFT START VOLTAGES ARE PREVENTED UNTIL ALL HAVE BEEN BROUGHT TO THE SAME PRESCRIBED STATE OF OPERATION	WO	04/33576	12-Oct-2004	Published
TRACKING SOFT START CIRCUIT FOR GENERATING A PLURALITY OF SOFT START VOLTAGES WHERE ALL SOFT START VOLTAGES ARE PREVENTED UNTIL ALL HAVE BEEN BROUGHT TO THE SAME PRESCRIBED STATE OF OPERATION	EP	04794828.6	23-May-2006	Pending
MULTIPHASE DC-DC CONVERTER WITH REDUCED RIPPLE	TW	93128000	16-Sep-2004	Pending
TRANSCONDUCTANCE AMPLIFIER WITH MULTI-EMITTER STRUCTURE FOR CURRENT BALANCE IN MULTI-PHASE SYNTHETIC RIPPLE REGULATOR	TW	93128538	21-Sep-2004	Pending
LINEAR PREDICTIVE CONTROLLER	TW	93129806	01-Oct-2004	Published
STARTUP CIRCUIT FOR CONVERTER WITH PRE-BIASED LOAD	TW	94101584	19-Jan-2005	Pending
DROOP AMPLIFIER CIRCUIT	TW	93128539	21-Sep-2004	Pending
DROOP AMPLIFIER CIRCUIT	WO	05/07561	28-Mar-2005	Pending
ENABLE AND DISABLE OF DIODE-EMULATION IN A DC/DC CONVERTER	TW	93128540	21-Sep-2004	Pending
CONTROLLER AND DRIVER ARCHITECTURE FOR DOUBLE- ENDED CIRCUITRY FOR POWERING COLD CATHODE FLUORESCENT LAMPS	CN	10070419.5	28-Apr-2005	Published
APPARATUS AND METHOD FOR SLIDING-MODE CONTROL IN A MULTIPHASE SWITCHING POWER SUPPLY	TW	94118562	06-Jun-2005	Pending
APPARATUS AND METHOD FOR FIXED-FREQUENCY CONTROL IN A SWITCHING POWER SUPPLY	TW	94118563	06-Jun-2005	Pending
APPARATUS AND METHOD FOR TRANSIENT CONTROL IN A MULTIPHASE SWITCHING POWER SUPPLY	TW	94116880	24-May-2005	Published
PHASE SHIFT MODULATION-BASED CONTROL OF AMPLITUDE OF AC VOLTAGE OUTPUT PRODUCED BY DOUBLE-ENDED DC-AC CONVERTER CIRCUITRY FOR POWERING HIGH VOLTAGE LOAD SUCH AS COLD CATHODE FLUORESCENT LAMP	CN	10190324	19-Jul-2005	Pending
FLOATING GATE ANALOG VOLTAGE LEVEL	TW	94122154	30-Jun-	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SHIFT CIRCUIT AND METHOD FOR PRODUCING A VOLTAGE REFERENCE THAT OPERATES ON A LOW SUPPLY VOLTAGE			2005	
IMPROVED ESD STRUCTURE	CN	200510125002	08-Nov-2005	Published
DC-AC CONVERTER HAVING PHASE-MODULATED, DOUBLE-ENDED, HALF-BRIDGE TOPOLOGY FOR POWERING HIGH VOLTAGE LOAD SUCH AS COLD CATHODE FLUORESCENT LAMP	TW	95113351	14-Apr-2006	Published
REFERENCE VOLTAGE GENERATOR FOR USE IN DISPLAY APPLICATIONS	TW	95148892	13-Feb-2006	Pending
REFERENCE VOLTAGE GENERATOR FOR USE IN DISPLAY APPLICATIONS	TW	95104701	13-Feb-2006	Pending
PWM CONTROLLER WITH DUAL-EDGE MODULATION USING DUAL RAMPS	EP	06100499.0	18-Jan-2006	Pending
PWM CONTROLLER WITH DUAL-EDGE MODULATION USING DUAL RAMPS	FR	06100499.0	18-Jan-2006	Pending
PWM CONTROLLER WITH DUAL-EDGE MODULATION USING DUAL RAMPS	IT	06100499.0	18-Jan-2006	Pending
PWM CONTROLLER WITH DUAL-EDGE MODULATION USING DUAL RAMPS	DE	06100499.0	18-Jan-2006	Pending
BIPOLAR STRUCTURES HAVING IMPROVED BVCEO/Rcs TRADE OFF MADE WITH DEPLETABLE COLLECTOR COLUMNS	TW	95130207	17-Aug-2006	Published
BIPOLAR STRUCTURES HAVING IMPROVED BVCEO/Rcs TRADE OFF MADE WITH DEPLETABLE COLLECTOR COLUMNS	WO	034224	01-Sep-2006	Pending
BIPOLAR STRUCTURES HAVING IMPROVED BVCEO/Rcs TRADE OFF MADE WITH DEPLETABLE COLLECTOR COLUMNS	JP	100071526	28-Feb-2008	Published
BIPOLAR STRUCTURES HAVING IMPROVED BVCEO/Rcs TRADE OFF MADE WITH DEPLETABLE COLLECTOR COLUMNS	KR	2008-7004866	28-Feb-2008	Pending
BIPOLAR STRUCTURES HAVING IMPROVED BVCEO/Rcs TRADE OFF MADE WITH DEPLETABLE COLLECTOR COLUMNS	CN	200680032231	28-Feb-2008	Pending
BIPOLAR STRUCTURES HAVING IMPROVED BVCEO/Rcs TRADE OFF MADE WITH DEPLETABLE COLLECTOR COLUMNS	EP	06802800.0	29-Feb-2008	Pending
GATE DRIVER TOPOLOGY FOR MAXIMUM LOAD EFFICIENCY	TW	96112429	10-Apr-2007	Pending
GATE DRIVER TOPOLOGY FOR MAXIMUM LOAD EFFICIENCY	CN	10129038.9	29-Jun-2007	Published
CIRCUIT FOR MULTIPLEXING DIGITAL AND ANALOG INFORMATION VIA SINGLE PIN OF DRIVER FOR SWITCHED MOSFETS OF DC-DC CONVERTER	TW	95135725	27-Sep-2006	Published

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CIRCUIT FOR MULTIPLEXING DIGITAL AND ANALOG INFORMATION VIA SINGLE PIN OF DRIVER FOR SWITCHED MOSFETS OF DC-DC CONVERTER	CN	200610171905	28-Sep-2006	Published
COMPENSATION OFFSET ADJUSTMENT SCHEME FOR FAST REFERENCE VOLTAGE TRANSITIONING	TW	95139127	24-Oct-2006	Pending
COMPENSATION OFFSET ADJUSTMENT SCHEME FOR FAST REFERENCE VOLTAGE TRANSITIONING	CN	10064228.2	16-Nov-2006	Published
ADAPTIVE PWM PULSE POSITION FOR FAST TRANSIENT RESPONSE	TW	95139125	24-Oct-2006	Pending
BIDIRECTIONAL COMMUNICATION PROTOCOL BETWEEN A SERIALIZER AND A DESERIALIZER	WO	07/075912	14-Aug-2007	Pending
BIDIRECTIONAL COMMUNICATION PROTOCOL BETWEEN A SERIALIZER AND A DESERIALIZER	TW	96129944	14-Aug-2007	Pending
BIDIRECTIONAL COMMUNICATION PROTOCOL BETWEEN A SERIALIZER AND A DESERIALIZER	EP	07840936.4	14-Aug-2007	Pending
BIDIRECTIONAL COMMUNICATION PROTOCOL BETWEEN A SERIALIZER AND A DESERIALIZER	CN	200780030295	13-Mar-2009	Pending
A MULTIPLE TIME PROGRAMMABLE (MTP) PMOS FLOATING-GATE-BASED NON-VOLATILE ELEMENT FOR A GENERAL-PURPOSE CMOS TECHNOLOGY WITH THICK GATE OXIDE	TW	96113629	18-Apr-2007	Published
A MULTIPLE TIME PROGRAMMABLE (MTP) PMOS FLOATING-GATE-BASED NON-VOLATILE ELEMENT FOR A GENERAL-PURPOSE CMOS TECHNOLOGY WITH THICK GATE OXIDE	CN	200710101379	20-Apr-2007	Pending
REDUCING POWER CONSUMPTION ASSOCIATED WITH HIGH BIAS CURRENTS IN SYSTEMS THAT DRIVE OR OTHERWISE CONTROL DISPLAYS	JP	2009-530507	05-Sep-2007	Pending
REDUCING POWER CONSUMPTION ASSOCIATED WITH HIGH BIAS CURRENTS IN SYSTEMS THAT DRIVE OR OTHERWISE CONTROL DISPLAYS	WO	US07/77595	05-Sep-2007	Pending
REDUCING POWER CONSUMPTION ASSOCIATED WITH HIGH BIAS CURRENTS IN SYSTEMS THAT DRIVE OR OTHERWISE CONTROL DISPLAYS	TW	96133386	07-Sep-2007	Pending
REDUCING POWER CONSUMPTION ASSOCIATED WITH HIGH BIAS CURRENTS IN SYSTEMS THAT DRIVE OR OTHERWISE	CN	200780039763	20-Apr-2009	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
CONTROL DISPLAYS				
REDUCING POWER CONSUMPTION ASSOCIATED WITH HIGH BIAS CURRENTS IN SYSTEMS THAT DRIVE OR OTHERWISE CONTROL DISPLAYS	KR	2009-7008101	30-Apr- 2009	Pending
DC-DC CONVERTERS HAVING IMPROVED CURRENT SENSING AND RELATED METHODS	TW	95136835	04-Oct- 2006	Pending
DC-DC CONVERTERS HAVING IMPROVED CURRENT SENSING AND RELATED METHODS	CN	200610136584 .	23-Oct- 2006	Pending
VOLTAGE REGULATOR HAVING CURRENT CANCELING COMPENSATION	TW	95137301	11-Oct- 2006	Pending
VOLTAGE REGULATOR HAVING CURRENT CANCELING COMPENSATION	CN	200610136583 .	23-Oct- 2006	Pending
METHOD AND APPARATUS FOR SHIELDING TUNNELING CIRCUIT AND FLOATING GATE FOR INTEGRATION OF A FLOATING GATE VOLTAGE REFERENCE IN A GENERAL PURPOSE CMOS TECHNOLOGY	TW	96129941	14-Aug- 2007	Published
METHOD AND APPARATUS FOR SHIELDING TUNNELING CIRCUIT AND FLOATING GATE FOR INTEGRATION OF A FLOATING GATE VOLTAGE REFERENCE IN A GENERAL PURPOSE CMOS TECHNOLOGY	CN	200780031191	20-Aug- 2007	Pending
METHOD AND APPARATUS FOR SHIELDING TUNNELING CIRCUIT AND FLOATING GATE FOR INTEGRATION OF A FLOATING GATE VOLTAGE REFERENCE IN A GENERAL PURPOSE CMOS TECHNOLOGY	FR	EP07811445	20-Aug- 2007	Published
METHOD AND APPARATUS FOR SHIELDING TUNNELING CIRCUIT AND FLOATING GATE FOR INTEGRATION OF A FLOATING GATE VOLTAGE REFERENCE IN A GENERAL PURPOSE CMOS TECHNOLOGY	DE	EP07811445	20-Aug- 2007	Published
METHOD AND APPARATUS FOR SHIELDING TUNNELING CIRCUIT AND FLOATING GATE FOR INTEGRATION OF A FLOATING GATE VOLTAGE REFERENCE IN A GENERAL PURPOSE CMOS TECHNOLOGY	IT	EP07811445	20-Aug- 2007	Published
METHOD AND APPARATUS FOR SHIELDING TUNNELING CIRCUIT AND FLOATING GATE FOR INTEGRATION OF A FLOATING GATE VOLTAGE REFERENCE IN A GENERAL PURPOSE CMOS TECHNOLOGY	EP	EP07811445	20-Aug- 2007	Published
METHOD AND APPARATUS FOR SHIELDING TUNNELING CIRCUIT AND FLOATING GATE FOR INTEGRATION OF A FLOATING GATE VOLTAGE REFERENCE IN A GENERAL	JP	2009-525600	20-Feb- 2009	Pending

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PURPOSE CMOS TECHNOLOGY				
USE OF DIFFERENTIAL PAIR AS SINGLE- ENDED DATA PATHS TO TRANSPORT LOW SPEED DATA	WO	07/079715	27-Sep- 2007	Published
USE OF DIFFERENTIAL PAIR AS SINGLE- ENDED DATA PATHS TO TRANSPORT LOW SPEED DATA	TW	96136528	29-Sep- 2007	Pending
LIGHT SENSORS WITH INFRARED SUPPRESSION	WO	2007/086528	05-Dec- 2007	Pending
LIGHT SENSORS WITH INFRARED SUPPRESSION	TW	96146710	07-Dec- 2007	Pending
LIGHT SENSORS WITH INFRARED SUPPRESSION	CN	200780045707	11-Jun- 2009	Pending
LIGHT SENSORS WITH INFRARED SUPPRESSION	DE	112007003037	12-Jun- 2009	Pending
CRADLE CHARGER CONTROLLER WITH BELOW GROUND LEVEL BIASING	TW	97103888	01-Feb- 2008	Published
CRADLE CHARGER CONTROLLER WITH BELOW GROUND LEVEL BIASING	CN	20080011863	01-Feb- 2008	Published
CRADLE CHARGER CONTROLLER WITH BELOW GROUND LEVEL BIASING	WO	08/052746	01-Feb- 2008	Published
AMBIENT LIGHT SENSOR USING CONVENTIONAL CMOS IMAGE SENSOR PROCESS	WO	08/051450	18-Jan- 2008	Pending
AMBIENT LIGHT SENSOR USING CONVENTIONAL CMOS IMAGE SENSOR PROCESS	CN	200880004357 .X	18-Jan- 2008	Pending
AMBIENT LIGHT SENSOR USING CONVENTIONAL CMOS IMAGE SENSOR PROCESS	TW	97102319	22-Jan- 2008	Pending
AMBIENT LIGHT SENSOR USING CONVENTIONAL CMOS IMAGE SENSOR PROCESS	DE	112008000380	10-Aug- 2009	Pending
MULTI-MODULE CURRENT SHARING SCHEME	TW	971044155	04-Feb- 2008	Pending
MULTI-MODULE CURRENT SHARING SCHEME	CN	10088348.5	28-Mar- 2008	Pending
IMPROVED BURIED ISOLATION LAYER	WO	08/063939	16-May- 2008	Pending
IMPROVED BURIED ISOLATION LAYER	TW	97119329	26-May- 2008	Pending
IMPROVED BURIED ISOLATION LAYER	EP	087557385	27-Nov- 2009	Pending
IMPROVED BURIED ISOLATION LAYER	KR	20097027527	30-Dec- 2009	Pending
INTEGRATED CIRCUIT WITH A SUBSURFACE DIODE	TW	97113566	27-Mar- 2008	Published
INTEGRATED CIRCUIT WITH A SUBSURFACE	WO	08/58560	28-Mar-	Pending

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DIODE			2008	
INTEGRATED CIRCUIT WITH A SUBSURFACE DIODE	EP	08732969.4	27-Nov-2009	Pending
INTEGRATED CIRCUIT WITH A SUBSURFACE DIODE	CN	200880020977	18-Dec-2009	Pending
INTEGRATED CIRCUIT WITH A SUBSURFACE DIODE	KR	09-7027435	30-Dec-2009	Pending
PULSE-ADDING SCHEME FOR SMOOTH PHASE DROPPING AT LIGHT LOAD CONDITION	TW	97107812	06-Mar-2008	Published
PULSE-ADDING SCHEME FOR SMOOTH PHASE DROPPING AT LIGHT LOAD CONDITION	EP	08155604.5	02-May-2008	Pending
PULSE-ADDING SCHEME FOR SMOOTH PHASE DROPPING AT LIGHT LOAD CONDITION	CN	10095275.2	04-May-2008	Pending
JUNCTION BARRIER SCHOTTKY DIODE	WO	US08/63251	09-May-2008	Pending
JUNCTION BARRIER SCHOTTKY DIODE	KR	2009-7023127	09-Nov-2009	Pending
RF-COUPLED DIGITAL ISOLATOR	WO	08/057909	21-Mar-2008	Pending
RF-COUPLED DIGITAL ISOLATOR	CN	20080015420. X	21-Mar-2008	Pending
RF-COUPLED DIGITAL ISOLATOR	TW	97112605	08-Apr-2008	Pending
JUNCTION BARRIER SCHOTTKY DIODE WITH DUAL SILICIDES AND METHOD OF MANUFACTURE	TW	97113566	15-Apr-2008	Published
JUNCTION BARRIER SCHOTTKY DIODE WITH DUAL SILICIDES AND METHOD OF MANUFACTURE	WO	US08/63251	09-Jun-2008	Pending
JUNCTION BARRIER SCHOTTKY DIODE WITH DUAL SILICIDES AND METHOD OF MANUFACTURE	KR	7023127	05-Nov-2009	Pending
JUNCTION BARRIER SCHOTTKY DIODE WITH DUAL SILICIDES AND METHOD OF MANUFACTURE	EP	08795848.4	01-Dec-2009	Pending
JUNCTION BARRIER SCHOTTKY DIODE WITH DUAL SILICIDES AND METHOD OF MANUFACTURE	CN	200880017609	25-Dec-2009	Pending
OVER-VOLTAGE PROTECTED BATTERY CHARGER WITH BYPASS	TW	97115190	25-Apr-2008	Published
OVER-VOLTAGE PROTECTED BATTERY CHARGER WITH BYPASS	CN	200810127911	19-Jun-2008	Pending
OVER-VOLTAGE PROTECTED BATTERY CHARGER WITH BYPASS	KR	0057720	19-Jun-2008	Pending
CLOSED LOOP, STEADY STATE FREQUENCY	TW	97119653	28-May-	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
CONTROL OF VARIABLE FREQUENCY SWITCHER ARCHITECTURES			2008	
CLOSED LOOP, STEADY STATE FREQUENCY CONTROL OF VARIABLE FREQUENCY SWITCHER ARCHITECTURES	EP	08159616	03-Jul-2008	Pending
CLOSED LOOP, STEADY STATE FREQUENCY CONTROL OF VARIABLE FREQUENCY SWITCHER ARCHITECTURES	CN	10214775	07-Jul-2008	Pending
LOAD CURRENT COMPENSATION IN SYNCHRONOUS POWER CONVERTERS	WO	080/070919	08-Sep- 2008	Published
DEAD-TIME TRANSITION ADJUSTMENTS FOR SYNCHRONOUS POWER CONVERTERS	WO	08/70887	23-Jul-2008	Published
DEAD-TIME TRANSITION ADJUSTMENTS FOR SYNCHRONOUS POWER CONVERTERS	TW	97127901	23-Jul-2008	Pending
DEAD-TIME TRANSITION ADJUSTMENTS FOR SYNCHRONOUS POWER CONVERTERS	EP	08782260.7	20-Jan- 2010	Pending
VOLTAGE CONVERTER WITH COMBINED BUCK CONVERTER AND CAPACITIVE VOLTAGE DIVIDER	JP	2009-540523	31-Jul-2008	Pending
VOLTAGE CONVERTER WITH COMBINED BUCK CONVERTER AND CAPACITIVE VOLTAGE DIVIDER	EP	8794905.3	31-Jul-2008	Pending
VOLTAGE CONVERTER WITH COMBINED BUCK CONVERTER AND CAPACITIVE VOLTAGE DIVIDER	WO	08/009237	31-Jul-2008	Pending
VOLTAGE CONVERTER WITH COMBINED BUCK CONVERTER AND CAPACITIVE VOLTAGE DIVIDER	TW	97129191	01-Aug- 2008	Pending
VOLTAGE CONVERTER WITH COMBINED BUCK CONVERTER AND CAPACITIVE VOLTAGE DIVIDER	KR	20097008838	29-Apr- 2009	Pending
VOLTAGE CONVERTER WITH COMBINED BUCK CONVERTER AND CAPACITIVE VOLTAGE DIVIDER	CN		20-Jan- 2010	Pending
TUNABLE VOLTAGE ISOLATION GROUND TO GROUND ESD CLAMP	CN		02-Apr- 2008	Pending
TUNABLE VOLTAGE ISOLATION GROUND TO GROUND ESD CLAMP	WO	08/79143	08-Oct- 2008	Published
TUNABLE VOLTAGE ISOLATION GROUND TO GROUND ESD CLAMP	TW	97138663	08-Oct- 2008	Published
TUNABLE VOLTAGE ISOLATION GROUND TO GROUND ESD CLAMP	KR	2010-7007551	07-Apr- 2010	Pending
TUNABLE VOLTAGE ISOLATION GROUND TO GROUND ESD CLAMP	EP	08837261.0	07-Apr- 2010	Pending
SWITCHING REGULATOR WITH BALANCED CONTROL CONFIGURATION TO ELIMINATE COMPENSATION	TW	097146161	28-Nov- 2008	Pending
SWITCHING REGULATOR WITH BALANCED	WO	08/85071	28-Nov-	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
CONTROL CONFIGURATION TO ELIMINATE COMPENSATION			2008	
MODULATOR WITH LINEAR PERIOD STRETCHING CAPABILITY	CN	200810175056	24-Oct- 2008	Pending
SYSTEM AND METHOD FOR IMPROVING INDUCTOR CURRENT SENSING ACCURACY OF A DC/DC VOLTAGE REGULATOR	CN	tbd	05-Dec- 2008	Pending
SYSTEM AND METHOD FOR IMPROVING INDUCTOR CURRENT SENSING ACCURACY OF A DC/DC VOLTAGE REGULATOR	WO	08/08566	05-Dec- 2008	Pending
SYSTEM AND METHOD FOR IMPROVING INDUCTOR CURRENT SENSING ACCURACY OF A DC/DC VOLTAGE REGULATOR	TW	97147234	05-Dec- 2008	Pending
SYSTEM AND METHOD FOR IMPROVING INDUCTOR CURRENT SENSING ACCURACY OF A DC/DC VOLTAGE REGULATOR	KR	10-7007619	08-Apr- 2010	Pending
PROXIMITY SENSORS AND METHODS FOR SENSING PROXIMITY	WO	08/80985	23-Oct- 2008	Pending
PROXIMITY SENSORS AND METHODS FOR SENSING PROXIMITY	TW	97141138	27-Oct- 2008	Pending
WAVEFORM CURRENT MONITOR USING RDSON OF LOW-SIDE BRIDGE FET	WO	09/031480	21-Jan- 2009	Published
WAVEFORM CURRENT MONITOR USING RDSON OF LOW-SIDE BRIDGE FET	TW	98104292	11-Feb- 2009	Published
HIGH-SIDE SENSING OF ZERO INDUCTOR CURRENT FOR STEP DOWN DC-DC CONVERTER	WO	US09/35821	03-Mar- 2009	Published
HIGH-SIDE SENSING OF ZERO INDUCTOR CURRENT FOR STEP DOWN DC-DC CONVERTER	TW	98 106796	03-Mar- 2009	Published
HYBRID LASER DIODE DRIVERS	WO	09/046381	05-Jun- 2009	Pending
HYBRID LASER DIODE DRIVERS	TW	98118686	05-Jun- 2009	Pending
DYNAMIC HEADROOM CONTROL FOR LED DRIVER	KR	2009-64209	14-Jul-2009	Pending
DYNAMIC HEADROOM CONTROL FOR LED DRIVER	TW	98123717	14-Jul-2009	Published
DYNAMIC HEADROOM CONTROL FOR LED DRIVER	CN	10160457.8	15-Jul-2009	Pending
CHOPPER STABILIZED AMPLIFIER	TW	09811520	04-Jun- 2009	Pending
CHOPPER STABILIZED AMPLIFIER	CN	200880004357 .X	09-Jun- 2009	Pending
CHOPPER STABILIZED AMPLIFIER	DE	tbd	10-Jun- 2009	Pending
VOLTAGE CONVERTER WITH COMBINED CAPACITIVE VOLTAGE DIVIDER, BUCK	WO	08/009247	31-Jul-2008	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
CONVERTER AND BATTERY CHARGER				
VOLTAGE CONVERTER WITH COMBINED CAPACITIVE VOLTAGE DIVIDER, BUCK CONVERTER AND BATTERY CHARGER	TW	97129190	01-Aug-2008	Pending
VOLTAGE CONVERTER WITH COMBINED CAPACITIVE VOLTAGE DIVIDER, BUCK CONVERTER AND BATTERY CHARGER	KR	7008518	24-Apr-2009	Pending
VOLTAGE CONVERTER WITH COMBINED CAPACITIVE VOLTAGE DIVIDER, BUCK CONVERTER AND BATTERY CHARGER	JP	540524	20-May-2009	Pending
VOLTAGE CONVERTER WITH COMBINED CAPACITIVE VOLTAGE DIVIDER, BUCK CONVERTER AND BATTERY CHARGER	EP	08/794915.2	02-Sep-2009	Pending
ADVANCED PHASE NUMBER CONTROL FOR IMPROVED EFFICIENCY AND FAST TRANSIENT RESPONSE IN MULTIPHASE CONVERTER APPLICATIONS	CN	00910173330. X	14-Jul-2009	Pending
ADVANCED PHASE NUMBER CONTROL FOR IMPROVED EFFICIENCY AND FAST TRANSIENT RESPONSE IN MULTIPHASE CONVERTER APPLICATIONS	TW	98123720	14-Jul-2009	Published
BUCK CONTROLLER INTEGRATED WITH BOOST CONTROL AND DRIVER	TW	98124220	17-Jul-2009	Published
BUCK CONTROLLER INTEGRATED WITH BOOST CONTROL AND DRIVER	DE	102009026218	21-Jul-2009	Published
BUCK CONTROLLER INTEGRATED WITH BOOST CONTROL AND DRIVER	CN	10161165.6	29-Jul-2009	Published
SYSTEM AND METHOD FOR REDUCING VOLTAGE OVERSHOOT DURING LOAD RELEASE WITHIN A BUCK REGULATOR	TW	98124806	23-Jul-2009	Published
SYSTEM AND METHOD FOR REDUCING VOLTAGE OVERSHOOT DURING LOAD RELEASE WITHIN A BUCK REGULATOR	CN	200910173378	23-Jul-2009	Pending
IMPROVED DUAL RAMP MODULATOR	TW	98125171	27-Jul-2009	Pending
IMPROVED DUAL RAMP MODULATOR	CN	0910159281.4	05-Aug-2009	Published
PWM CLOCK GENERATION SYSTEM AND METHOD TO IMPROVE TRANSIENT RESPONSE OF A VOLTAGE REGULATOR	TW	98125169	27-Jul-2009	Published
PWM CLOCK GENERATION SYSTEM AND METHOD TO IMPROVE TRANSIENT RESPONSE OF A VOLTAGE REGULATOR	CN	10159283.3	05-Aug-2009	Pending
CONSTANT LOOP GAIN CONTROL FOR BUCK REGULATOR/MODULE	TW	98128339	24-Aug-2009	Pending
CONSTANT LOOP GAIN CONTROL FOR BUCK REGULATOR/MODULE	CN	200910178748	23-Sep-2009	Pending
PHASE SWAPPER SCHEME FOR IMPROVED PHASE CURRENT BALANCE IN PHASE	TW	98 12499	24-Jul-2009	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
DOUBLER				
PHASE SWAPPER SCHEME FOR IMPROVED PHASE CURRENT BALANCE IN PHASE DOUBLER	DE	2009043918.8	01-Sep- 2009	Pending
PHASE SWAPPER SCHEME FOR IMPROVED PHASE CURRENT BALANCE IN PHASE DOUBLER	CN	200910205000	29-Sep- 2009	Pending
CALIBRATION OF TWO-CHANNEL TIME- INTERLEAVED ANALOG-TO-DIGITAL CONVERTERS	CN	200910266822	28-Dec- 2009	Pending
SYSTEM AND METHOD FOR PHASE DROPPING AND ADDING	DE	102010016136	25-Mar- 2010	Pending
SYSTEM AND METHOD FOR PHASE DROPPING AND ADDING	CN	tbd	25-Mar- 2010	Pending
SYSTEM AND METHOD FOR PHASE DROPPING AND ADDING	TW	99108857	25-Mar- 2010	Pending
CO-PACKAGING APPROACH FOR POWER CONVERTERS BASED ON PLANAR DEVICES, STRUCTURE AND METHOD	TW	98143097	16-Dec- 2009	Pending
CO-PACKAGING APPROACH FOR POWER CONVERTERS BASED ON PLANAR DEVICES, STRUCTURE AND METHOD	EP	EP09180016.9	18-Dec- 2009	Pending
CO-PACKAGING APPROACH FOR POWER CONVERTERS BASED ON PLANAR DEVICES, STRUCTURE AND METHOD	CN	2009-128590	22-Dec- 2009	Pending
CO-PACKAGING APPROACH FOR POWER CONVERTERS BASED ON PLANAR DEVICES, STRUCTURE AND METHOD	KR	20090128590	22-Dec- 2009	Pending
ADAPTIVE PWM PULSE POSITION FOR FAST TRANSIENT RESPONSE	TW	98125513	19-Jul-2009	Pending
ADAPTIVE PWM PULSE POSITION FOR FAST TRANSIENT RESPONSE	CN	12273441	17-Nov- 2009	Pending
IMPROVED N-BIT PIN ADC READER	CN	tbd	07-Jan- 2010	Pending
IMPROVED N-BIT PIN ADC READER	TW	99100214	07-Jan- 2010	Pending
ACTIVE DROOP CURRENT SHARING	CN	200910173353	20-Jul-2009	Pending
ACTIVE DROOP CURRENT SHARING	TW	98124396	20-Jul-2009	Published
ADDING AND DROPPING PHASES IN CURRENT SHARING	CN	200910173352	20-Jul-2009	Pending
ADDING AND DROPPING PHASES IN CURRENT SHARING	TW	98124397	20-Jul-2009	Published
INTELLIGENT MANAGEMENT OF CURRENT SHARING GROUP	CN	200910173354	20-Jul-2009	Pending
INTELLIGENT MANAGEMENT OF CURRENT SHARING GROUP	TW	98124398	20-Jul-2009	Published
METHOD TO PROPERLY RAMP CURRENT SHARING RAIL	DE	202009009853	20-Jul-2009	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
METHOD TO PROPERLY RAMP CURRENT SHARING RAIL	CN	200910173351	20-Jul-2009	Pending
METHOD TO PROPERLY RAMP CURRENT SHARING RAIL	TW	098124399	20-Jul-2009	Published
STACKED POWER CONVERTER STRUCTURE AND METHOD	WO	US09/064748	17-Nov-2009	Pending
SINGLE DIE OUTPUT POWER STAGE USING TRENCH-GATE LOW-SIDE AND LDMOS HIGH-SIDE MOSFETS, STRUCTURE AND METHOD	TW	98143267	17-Dec-2009	Pending
SINGLE DIE OUTPUT POWER STAGE USING TRENCH-GATE LOW-SIDE AND LDMOS HIGH-SIDE MOSFETS, STRUCTURE AND METHOD	EP	09180025.0	18-Dec-2009	Pending
SINGLE DIE OUTPUT POWER STAGE USING TRENCH-GATE LOW-SIDE AND LDMOS HIGH-SIDE MOSFETS, STRUCTURE AND METHOD	CN	tbd	22-Dec-2009	Pending
SINGLE DIE OUTPUT POWER STAGE USING TRENCH-GATE LOW-SIDE AND LDMOS HIGH-SIDE MOSFETS, STRUCTURE AND METHOD	KR	2009-128591	22-Dec-2009	Pending
A CIRCUIT TO MULTIPLEX A CURRENT LIMITING INPUT TO AN OPEN-DRAIN OUTPUT	TW	99105927	02-Mar-2010	Pending
A CIRCUIT TO MULTIPLEX A CURRENT LIMITING INPUT TO AN OPEN-DRAIN OUTPUT	WO	US2010/02591 1	02-Mar-2010	Pending
SOLAR CELL WITH INTEGRATED SWITCH AND CONNECTION METHOD	TW	99102108	26-Jan-2010	Pending
SOLAR CELL WITH INTEGRATED SWITCH AND CONNECTION METHOD	CN	201010118628	28-Jan-2010	Pending
UN-BUFFERED SEGMENTED R-DAC WITH SWITCH CURRENT REDUCTION	EP	10157599.1	26-Feb-2010	Pending
UN-BUFFERED SEGMENTED R-DAC WITH SWITCH CURRENT REDUCTION	CN	tbd	30-Mar-2010	Pending
UN-BUFFERED SEGMENTED R-DAC WITH SWITCH CURRENT REDUCTION	TW	99109558	30-Mar-2010	Pending
SYSTEM AND METHOD FOR DETERMINING OUTPUT VOLTAGE LEVEL INFORMATION FROM PHASE VOLTAGE FOR SWITCHED MODE REGULATOR CONTROLLERS	TW	99110976	09-Apr-2010	Pending
LOW THERMAL RESISTANCE AND ROBUST CHIP-SCALE-PACKAGE (CSP), STRUCTURE AND METHOD	WO	US10/26820	10-Mar-2010	Pending
TRANSIENT SUPPRESSION FOR BOOT REGULATOR	TW	98123719	14-Jul-2009	Published
TRANSIENT SUPPRESSION FOR BOOT	KR	2009-64210	14-Jul-2009	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
REGULATOR				
TRANSIENT SUPPRESSION FOR BOOT REGULATOR	CN	10160456.3	15-Jul-2009	Pending

Elantec Semiconductor, Inc. – U.S. Registered Patents and Patent Applications

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
INPUT BIAS CURRENT COMPENSATION FOR A COMPARATOR	United States	5128564	07-Jul-1992	Granted
SLEW CONTROL IN CURRENT FEEDBACK AMPLIFIERS	United States	5179355	12-Jan-1993	Granted
CURRENT MIRROR WITH ERROR CORRECTION	United States	5321371	14-Jun-1994	Granted
CIRCUIT FOR INTRODUCING HYSTERESIS	United States	5334883	02-Aug-1994	Granted
LEVEL SHIFTER CIRCUIT	United States	5341047	23-Aug-1994	Granted
LOW INPUT RESISTANCE CURRENT-MODE FEEDBACK OPERATIONAL AMPLIFIER INPUT STAGE	United States	5351012	27-Sep-1994	Granted
ANALOG MULTIPLEXER	United States	5352987	04-Oct-1994	Granted
LOW INPUT RESISTANCE AMPLIFIER STAGE	United States	5352989	04-Oct-1994	Granted
COMPLEMENTARY GAIN CONTROL CIRCUIT	United States	5374898	20-Dec-1994	Granted
COMPLEMENTARY ANALOG MULTIPLIER CIRCUITS WITH DIFFERENTIAL GROUND REFERENCED OUTPUTS AND SWITCHING CAPABILITY	United States	5389840	14-Feb-1995	Granted
INPUT STAGE IMPROVEMENTS FOR CURRENT FEEDBACK AMPLIFIERS	United States	5418495	23-May-1995	Granted
VARACTOR COMPENSATION IN AMPLIFIER CIRCUITS	United States	5420542	30-May-1995	Granted
DIFFERENTIAL AMPLIFIER MULTIPLEXER	United States	5426396	20-Jun-1995	Granted
DIFFERENTIAL ANALOG MEMORY CELL AND METHOD FOR ADJUSTING SAME	United States	5430670	04-Jul-1995	Granted
ACTIVE FOLDED CASCODE	United States	5469104	21-Nov-1995	Granted
VOLTAGE CONTROLLED AMPLIFIER WHICH REDUCES DIFFERENTIAL GAIN	United States	5469106	21-Nov-1995	Granted
CLASS AB COMPLEMENTARY OUTPUT STAGE	United States	5475343	12-Dec-1995	Granted
ULTRA HIGH GAIN AMPLIFIER	United States	5479133	26-Dec-1995	Granted
SYNCHRONIZING SIGNAL ACTIVE FILTER AND METHOD	United States	5528303	18-Jun-1996	Granted
AMPLIFIER CIRCUIT WITH DYNAMIC OUTPUT STAGE BIASING	United States	5568090	22-Oct-1996	Granted
CIRCUIT COMPENSATING FOR CAPACITANCE AT INVERTING INPUT OF	United States	5578967	26-Nov-1996	Granted

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CURRENT FEEDBACK AMPLIFIER				
ULTRA HIGH GAIN AMPLIFIER	United States	5614866	25-Mar-1997	Granted
SEMICONDUCTOR WAFER HAVING SLICES AND LIMITED SCRIBE AREAS FOR IMPLEMENTING DIE	United States	5656851	12-Aug-1997	Granted
HIGH PRECISION POLISHING TOOL	United States	5681216	28-Oct-1997	Granted
MONOLITHIC POWER CONVERTER WITH A POWER SWITCH AS A CURRENT SENSING ELEMENT	United States	5723974	03-Mar-1998	Granted
A POWER CONTROL CHIP WITH CIRCUITRY THAT ISOLATES SWITCHING ELEMENTS AND BOND WIRES FOR TESTING	United States	5793126	11-Aug-1998	Granted
DIFFERENTIAL AMPLIFIER WITH IMPROVED VOLTAGE GAIN	United States	5812026	22-Sep-1998	Granted
GAS AGITATED LIQUID ETCHER	United States	5846374	08-Dec-1998	Granted
VIDEO SYNC SIGNAL SLICING USING VARIABLE GAIN CONTROL	United States	5867222	02-Feb-1999	Granted
CONSTANT AMPLITUDE VS. FREQUENCY OSCILLATOR	United States	5874865	23-Feb-1999	Granted
REDUCED OUTPUT CAPACITANCE CIRCUIT FOR DRIVING A GROUNDED LOAD IN RESPONSE TO A STEPPED INPUT	United States	5898334	27-Apr-1999	Granted
SILICON ON INSULATOR PROCESS WITH RECOVERY OF A DEVICE LAYER FROM AN ETCH STOP LAYER	United States	5985728	16-Nov-1999	Granted
DIFFERENTIAL AMPLIFIER WITH IMPROVED VOLTAGE GAIN USING OPERATIONAL AMPLIFIERS TO ELEIMINATE DIODE VOLTAGE DROPS	United States	6031424	29-Feb-2000	Granted
METHOD FOR MAKING A CONTACT STRUCTURE FOR A POLYSILICON FILLED TRENCH ISOLATION	United States	6037239	14-Mar-2000	Granted
POLYSILICON FILLED TRENCH ISOLATION STRUCTURE FOR SOI INTEGRATED CIRCUITS	United States	6096621	01-Aug-2000	Granted
METHOD OF FORMING RETROGRADE WELLS IN BONDED WAFERS	United States	6140205	31-Oct-2000	Granted
LOAD CURRENT CONTROL CIRCUITRY FOR POWER SUPPLIES DRIVING A COMMON LOAD FOR PROVIDING A UNIFORM TEMPERATURE DISTRIBUTION	United States	6204720	20-Mar-2001	Granted
CIRCUIT PROVIDING A NEGATIVE RESISTANCE TO OFFSET ERROR VOLTAGE FOR USE WITH A FOLDED CASCODE AMPLIFIER	United States	6229394	08-May-2001	Granted
HIGH PERFORMANCE INTERMEDIATE STAGE CIRCUIT FOR A RAIL-TO-RAIL INPUT/OUTPUT CMOS OPERATIONAL AMPLIFIER	United States	6300834	09-Oct-2001	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
HIGH PERFORMANCE INTERMEDIATE STAGE CIRCUIT FOR A RAIL-TO-RAIL INPUT/OUTPUT CMOS OPERATIONAL AMPLIFIER	United States	6384683	07-May-2002	Granted
REDUCED SUBSTRATE CAPACITANCE HIGH PERFORMANCE SOI PROCESS	United States	6403447	11-Jun-2002	Granted
DISTORTION IMPROVEMENT IN AMPLIFIERS	United States	6448853	10-Sep-2002	Granted
A HIGH SPEED, LOW-POWER CMOS CIRCUIT WITH CONSTANT OUTPUT SWING AND VARIABLE TIME DELAY FOR A VOLTAGE CONTROLLED OSCILLATOR	United States	6501317	31-Dec-2002	Granted
CURRENT FEEDBACK AMPLIFIER EXHIBITING REDUCED DISTORTION	United States	6535064	18-Mar-2003	Granted
COMPENSATION METHOD IN A CLASS B AMPLIFIER	United States	6538514	25-Mar-2003	Granted
AN ALTERNATIVE VIDEO SYNC DETECTOR	United States	6573943	03-Jun-2003	Granted
REDUCED SUBSTRATE CAPACITANCE HIGH PERFORMANCE SOI PROCESS	United States	6617646	09-Sep-2003	Granted
A CMOS RELAXATION OSCILLATOR CIRCUIT WITH IMPROVED SPEED AND REDUCED PROCESS/TEMPERATURE VARIATIONS	United States	6720836	13-Apr-2004	Granted
SIMPLIFIED MULTI-OUTPUT DIGITAL TO ANALOG CONVERTER (DAC) FOR A FLAT PANEL DISPLAY	United States	6781532	24-Aug-2004	Granted
METHODS FOR EXTRACTING THE MEAN (COMMON MODE) VOLTAGE OF TWO INPUT SIGNALS	United States	6867643	15-Mar-2005	Granted
COMMON- MODE AND DIFFERENTIAL- MODE COMPENSATION FOR OPERATIONAL AMPLIFIER CIRCUITS	United States	6867649	15-Mar-2005	Granted
ANALOG DEMULTIPLEXING	United States	6897800	24-May-2005	Granted
SIMPLIFIED MULTI-OUTPUT DIGITAL TO ANALOG CONVERTER (DAC) FOR A FLAT PANEL DISPLAY	United States	6927712	09-Aug-2005	Granted
AN ALTERNATIVE VIDEO SYNC DETECTOR	United States	6977692	20-Dec-2005	Granted
CLASS G AMPLIFIERS	United States	6982600	03-Jan-2006	Granted
CURRENT MODE PREAMPLIFIERS	United States	6995615	07-Feb-2006	Granted
NOVEL NOISE CANCELLATION CIRCUIT AND METHODS	United States	6998905	14-Feb-2006	Granted
ANALOG DEMULTIPLEXING	United States	7002498	21-Feb-2006	Granted
INPUT STAGE FOR MULTIPLEXING AND METHODS FOR USING AN INPUT STAGE FOR MULTIPLEXING	United States	7030679	18-Apr-2006	Granted
METHODS AND SYSTEMS FOR DRIVING DISPLAYS INCLUDING CAPACITIVE DISPLAY ELEMENTS	United States	7034781	25-Apr-2006	Granted
METHODS FOR EXTRACTING THE MEAN	United States	7053698	30-May-2006	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
(COMMON MODE) VOLTAGE OF TWO INPUT SIGNALS				
CURRENT OUTPUT STAGE	United States	7053699	30-May-2006	Granted
SYSTEM AND METHODS FOR AUTOMATIC POWER CONTROL OF LASER DIODES	United States	7061951	13-Jun-2006	Granted
BIAS CURRENT CANCELLATION FOR DIFFERENTIAL AMPLIFIERS	United States	7068106	27-Jun-2006	Granted
NOVEL NOISE CANCELLATION CIRCUIT AND METHODS	United States	7075362	11-Jul-2006	Granted
ADJUSTABLE POWER CONTROL FOR LASER DRIVERS AND LASER DIODES	United States	7106769	12-Sep-2006	Granted
BIAS CURRENT CANCELLATION FOR DIFFERENTIAL AMPLIFIERS	United States	7145391	05-Dec-2006	Granted
AN ALTERNATIVE VIDEO SYNC DETECTOR	United States	7215379	08-May-2007	Granted
LASER DRIVERS THAT PROVIDE DOUBLE BUFFERING OF SERIAL TRANSFERS	United States	7246199	17-Jul-2007	Granted
INPUT STAGE FOR MULTIPLEXING AND METHODS FOR USING AN INPUT STAGE FOR MULTIPLEXING	United States	7250805	31-Jul-2007	Granted
LASER DRIVERS THAT PROVIDE DOUBLE BUFFERING OF SERIAL TRANSFERS	United States	7353333	01-Apr-2008	Granted
INPUT STAGE FOR MULTIPLEXING AND METHODS FOR USING AN INPUT STAGE FOR MULTIPLEXING	United States	7378897	27-May-2008	Granted
SYSTEM AND METHODS FOR AUTOMATIC POWER CONTROL OF LASER DIODES	United States	7382807	03-Jun-2008	Granted
AN ALTERNATIVE VIDEO SYNC DETECTOR	United States	11/737068	18-Apr-2007	Pending
LASER DRIVERS THAT PROVIDE DOUBLE BUFFERING OF SERIAL TRANSFERS	United States	7562187	14-Jul-2009	Granted

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Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
A HIGH SPEED, LOW-POWER CMOS CIRCUIT WITH CONSTANT OUTPUT SWING AND VARIABLE TIME DELAY FOR A VOLTAGE CONTROLLED OSCILLATOR	CN	ZL02809718	31-Aug- 2005	Granted
SIMPLIFIED MULTI-OUTPUT DIGITAL TO ANALOG CONVERTER (DAC) FOR A FLAT PANEL DISPLAY	JP	4359504	14-Aug- 2009	Granted
SIMPLIFIED MULTI-OUTPUT DIGITAL TO ANALOG CONVERTER (DAC) FOR A FLAT PANEL DISPLAY	TW	I267818	01-Dec- 2006	Granted
ANALOG DEMULTIPLEXING	KR	10-0910481	27-Jul-2009	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
ANALOG DEMULTIPLEXING	JP	4111915	18-Apr-2008	Granted
ANALOG DEMULTIPLEXING	TW	NI-193308	01-Jan-2004	Granted
LASER DRIVERS THAT PROVIDE DOUBLE BUFFERING OF SERIAL TRANSFERS	TW	93114741	25-May-2004	Pending
PROGRAMMABLE DAMPING FOR LASER DRIVERS	TW	93107624	22-Mar-2004	Pending
ADJUSTABLE POWER CONTROL FOR LASER DRIVERS AND LASER DIODES	TW	93107625	22-Mar-2004	Pending
TWO-WIRE CHIP-TO-CHIP INTERFACE	JP	2005-120954	19-Apr-2005	Published
NOVEL NOISE CANCELLATION CIRCUIT AND METHODS	JP	2004-163600	01-Jun-2004	Pending

D2 Audio Corporation – U.S Registered Patents and Patent Applications.

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SYSTEMS AND METHODS FOR IMPROVING PERFORMANCE IN A DIGITAL AMPLIFIER BY ADDING AN ULTRASONIC SIGNAL TO AN INPUT AUDIO SIGNAL	United States	7649410	19-Jan-2010	Granted
SYSTEMS AND METHODS FOR AUTOMATICALLY ADJUSTING CHANNEL TIMING	United States	7023268	04-Apr-2006	Granted
SYSTEMS AND METHODS FOR PROVIDING MULTI CHANNEL PULSE WIDTH MODULATED AUDIO WITH STAGGERED OUTPUTS	United States	7061312	13-Jun-2006	Granted
INTEGRATED PULSHI MODE WITH SHUTDOWN	United States	7078963	18-Jul-2006	Granted
SYSTEMS AND METHODS FOR IMPLEMENTING A SAMPLE RATE CONVERTER USING HARDWARE AND SOFTWARE TO MAXIMIZE SPEED AND FLEXIBILITY	United States	7167112	23-Jan-2007	Granted
SYSTEMS AND METHODS FOR LOAD DETECTION AND CORRECTION IN A DIGITAL AMPLIFIER	United States	7259618	21-Aug-2007	Granted
DIGITAL PWM AMPLIFIER WITH SIMULATION-BASED FEEDBACK	United States	7286009	23-Oct-2007	Granted
SYSTEMS AND METHODS FOR OVER-CURRENT PROTECTION	United States	7286010	23-Oct-2007	Granted
SYSTEMS AND METHODS FOR IMPROVING PERFORMANCE IN A DIGITAL AMPLIFIER BY	United States	7315264	01-Jan-2008	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
ADDING ULTRASONIC SIGNAL TO AN INPUT AUDIO SIGNAL				
SYSTEMS AND METHODS FOR MINIMIZING DELAY IN A CONTROL PATH	United States	7362254	22-Apr-2008	Granted
SYSTEMS AND METHODS FOR PULSE WIDTH MODULATING ASYMMETRIC SIGNAL LEVELS	United States	7425853	16-Sep-2008	Granted
POWER SUPPLY FEED FORWARD ANALOG INPUT FILTER COMPONENT MISMATCH	United States	7436255	14-Oct-2008	Granted
SYSTEMS AND METHODS FOR MAINTAINING MINIMUM PULSE WIDTH DURING SHUTDOWN	United States	7436256	14-Oct-2008	Granted
OUTPUT STAGE SYNCHRONIZATION	United States	7436918	14-Oct-2008	Granted
SYSTEMS AND METHODS FOR SAMPLE RATE CONVERSION USING MULTIPLE RATE ESTIMATE COUNTERS	United States	7474722	06-Jan-2009	Granted
SYSTEMS AND METHODS FOR CORRECTING ERRORS RESULTING FROM COMPONENT MISMATCH IN A FEEDBACK PATH	United States	7482865	27-Jan-2009	Granted
PWM FEEDBACK/FEEDFORWARD PROTECTION	United States	7518444	14-Apr-2009	Granted
DIGITAL PWM AMPLIFIER WITH SIMULATION-BASED FEEDBACK	United States	7576606	18-Aug-2009	Granted
MULTI-CHIP PWM SYNCHRONIZATION AND COMMUNICATION	United States	7584009	01-Sep-2009	Granted
CLIP DETECTION IN PWM AMPLIFIER	United States	7590251	15-Sep-2009	Granted
SYSTEMS AND METHODS FOR SAMPLE RATE CONVERSION USING MULTIPLE RATE ESTIMATE COUNTERS	United States	12/343317	23-Dec-2008	Pending
DIGITAL PWM AMPLIFIER WITH SIMULATION-BASED FEEDBACK	United States	11/782702	25-Jul-2007	Published
DIGITAL PWM AMPLIFIER WITH SIMULATION-BASED FEEDBACK	United States	12/542634	17-Aug-2009	Published
SYSTEMS AND METHODS FOR PROTECTION OF AUDIO AMPLIFIER CIRCUITS	United States	10/805594	19-Mar-2004	Pending
STREAMING MULTI-CHANNEL AUDIO AS PACKETIZED DATA OR PARALLEL DATA WITH A SEPARATE INPUT FRAME SYNC	United States	10/805574	20-Mar-2004	Pending
SRC WITH MULTIPLE SETS OF FILTER COEFFICIENTS IN MEMORY AND A HIGH ORDER COEFFICIENT INTERPOLATOR	United States	10/805596	19-Mar-2004	Pending
PHASE ALIGNMENT OF AUDIO OUTPUT DATA IN A MULTI-CHANNEL CONFIGURATION	United States	10/805590	19-Mar-2004	Pending
SYSTEMS AND METHODS FOR SWITCHING AND MIXING SIGNALS IN A MULTI-CHANNEL AMPLIFIER	United States	10/843852	12-May-2004	Pending
SYSTEMS AND METHODS FOR CONTROLLING AUDIO VOLUME IN THE	United States	12/202355	01-Sep-2008	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
PROCESSOR OF A HIGH DEFINITION AUDIO CODEC				
SYSTEMS AND METHODS FOR COMMUNICATION BETWEEN A PC APPLICATION AND THE DSP IN AN HDA AUDIO CODEC	United States	12/202356	01-Sep-2008	Published
SYSTEMS AND METHODS FOR OVERRIDING HARDWIRED RESPONSES IN AN HDA CODEC	United States	12/202358	01-Sep-2008	Published
SYSTEMS AND METHODS FOR BOOTING A CODEC PROCESSOR OVER A HIGH DEFINITION AUDIO BUS	United States	12/202359	01-Sep-2008	Published
SYSTEMS AND METHODS FOR SHADOWING AN HDA CODEC	United States	12/202360	01-Sep-2008	Published
SYSTEMS AND METHODS FOR CONTROLLING HDA SYSTEM CAPABILITIES	United States	12/202361	01-Sep-2008	Pending
SYSTEMS AND METHODS TO MINIMIZE STARTUP TRANSIENTS IN CLASS D AMPLIFIERS	United States	11/847449	30-Aug-2007	Published
SYSTEMS AND METHODS FOR LOAD DETECTION AND CORRECTION IN A DIGITAL AMPLIFIER	United States	12/544806	20-Aug-2009	Pending

D2 Audio Corporation – Foreign Registered Patents and Patent Applications.

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SYSTEMS AND METHODS FOR PROTECTION OF AUDIO AMPLIFIER CIRCUITS	CN	80010567	29-Apr-2009	Granted
SYSTEMS AND METHODS FOR PROTECTION OF AUDIO AMPLIFIER CIRCUITS	EP	1606875	21-May-2008	Granted
SYSTEMS AND METHODS FOR PROTECTION OF AUDIO AMPLIFIER CIRCUITS	FR	1606875	21-May-2008	Granted
SYSTEMS AND METHODS FOR PROTECTION OF AUDIO AMPLIFIER CIRCUITS	DE	6004013940	21-May-2008	Granted
SYSTEMS AND METHODS FOR PROTECTION OF AUDIO AMPLIFIER CIRCUITS	GB	1606875	21-May-2008	Granted
SYSTEMS AND METHODS FOR IMPLEMENTING A SAMPLE RATE CONVERTER USING HARDWARE AND SOFTWARE TO MAXIMIZE SPEED AND FLEXIBILITY	DE	1609241	12-Dec-2007	Granted

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SYSTEMS AND METHODS FOR IMPLEMENTING A SAMPLE RATE CONVERTER USING HARDWARE AND SOFTWARE TO MAXIMIZE SPEED AND FLEXIBILITY	EP	1609241	12-Dec-2007	Granted
SYSTEMS AND METHODS FOR IMPLEMENTING A SAMPLE RATE CONVERTER USING HARDWARE AND SOFTWARE TO MAXIMIZE SPEED AND FLEXIBILITY	GB	1609241	12-Dec-2007	Granted
SYSTEMS AND METHODS FOR IMPLEMENTING A SAMPLE RATE CONVERTER USING HARDWARE AND SOFTWARE TO MAXIMIZE SPEED AND FLEXIBILITY	FR	1609241	12-Dec-2007	Granted
SYSTEMS AND METHODS FOR IMPLEMENTING A SAMPLE RATE CONVERTER USING HARDWARE AND SOFTWARE TO MAXIMIZE SPEED AND FLEXIBILITY	CN	ZL80010769	08-Jul-2009	Granted
SYSTEMS AND METHODS FOR PROVIDING MULTI CHANNEL PULSE WIDTH MODULATED AUDIO WITH STAGGERED OUTPUTS	CN	ZL80010526	24-Jun-2009	Granted
SYSTEMS AND METHODS FOR PROVIDING MULTI CHANNEL PULSE WIDTH MODULATED AUDIO WITH STAGGERED OUTPUTS	EP	1623501	12-May-2008	Granted
SYSTEMS AND METHODS FOR PROVIDING MULTI CHANNEL PULSE WIDTH MODULATED AUDIO WITH STAGGERED OUTPUTS	JP	4358860	14-Aug-2009	Granted
SYSTEMS AND METHODS FOR PROVIDING MULTI CHANNEL PULSE WIDTH MODULATED AUDIO WITH STAGGERED OUTPUTS	DE	1623501	12-May-2008	Granted
SYSTEMS AND METHODS FOR PROVIDING MULTI CHANNEL PULSE WIDTH MODULATED AUDIO WITH STAGGERED OUTPUTS	FR	1623501	12-May-2008	Granted
SYSTEMS AND METHODS FOR PROVIDING MULTI CHANNEL PULSE WIDTH MODULATED AUDIO WITH STAGGERED OUTPUTS	GB	1623501	12-May-2008	Granted
SYSTEMS AND METHODS FOR PROTECTION OF AUDIO AMPLIFIER CIRCUITS	WO	US04/08546	29-Mar-2004	Pending
SYSTEMS AND METHODS FOR PROTECTION OF AUDIO AMPLIFIER	JP	2006-507403	16-Sep-2005	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
CIRCUITS				
SYSTEMS AND METHODS FOR PROTECTION OF AUDIO AMPLIFIER CIRCUITS	HK	06108266.4	25-Jul-2006	Pending
SYSTEMS AND METHODS FOR IMPLEMENTING A SAMPLE RATE CONVERTER USING HARDWARE AND SOFTWARE TO MAXIMIZE SPEED AND FLEXIBILITY	CN	0910138482.6	19-Mar-2004	Pending
SYSTEMS AND METHODS FOR IMPLEMENTING A SAMPLE RATE CONVERTER USING HARDWARE AND SOFTWARE TO MAXIMIZE SPEED AND FLEXIBILITY	JP	507404	16-Sep-2005	Pending
SYSTEMS AND METHODS FOR IMPLEMENTING A SAMPLE RATE CONVERTER USING HARDWARE AND SOFTWARE TO MAXIMIZE SPEED AND FLEXIBILITY	HK	07111872.3	01-Nov-2007	Pending
CLIP DETECTION IN PWM AMPLIFIER	WO	PCT-04/08534	19-Mar-2004	Pending
CLIP DETECTION IN PWM AMPLIFIER	JP	2006-507396	16-Sep-2005	Pending
CLIP DETECTION IN PWM AMPLIFIER	EP	04757922.2	27-Sep-2005	Pending
CLIP DETECTION IN PWM AMPLIFIER	CN	0480009689.9	11-Oct-2005	Pending
CLIP DETECTION IN PWM AMPLIFIER	HK	07101872.4	15-Feb-2007	Pending
SYSTEMS AND METHODS FOR PROVIDING MULTI CHANNEL PULSE WIDTH MODULATED AUDIO WITH STAGGERED OUTPUTS	HK	06108265.5	27-Sep-2005	Pending
SYSTEMS AND METHODS FOR IMPROVING PERFORMANCE IN A DIGITAL AMPLIFIER BY ADDING ULTRASONIC SIGNAL TO AN INPUT AUDIO SIGNAL	WO	PCT07/60984	24-Jan-2007	Pending
SYSTEMS AND METHODS FOR IMPROVING PERFORMANCE IN A DIGITAL AMPLIFIER BY ADDING ULTRASONIC SIGNAL TO AN INPUT AUDIO SIGNAL	JP	2008-551577	17-Jul-2008	Pending
SYSTEMS AND METHODS FOR IMPROVING PERFORMANCE IN A DIGITAL AMPLIFIER BY ADDING ULTRASONIC SIGNAL TO AN INPUT AUDIO SIGNAL	CN	07/8002954.4	23-Jul-2008	Pending
SYSTEMS AND METHODS FOR IMPROVING PERFORMANCE IN A DIGITAL AMPLIFIER BY ADDING ULTRASONIC SIGNAL TO AN	EP	07717387.0	22-Aug-2008	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
INPUT AUDIO SIGNAL				
SYSTEMS AND METHODS FOR IMPROVING PERFORMANCE IN A DIGITAL AMPLIFIER BY ADDING ULTRASONIC SIGNAL TO AN INPUT AUDIO SIGNAL	WO	PCT/07/60574	16-Jan- 2007	Pending
SYSTEMS AND METHODS FOR IMPROVING PERFORMANCE IN A DIGITAL AMPLIFIER BY ADDING ULTRASONIC SIGNAL TO AN INPUT AUDIO SIGNAL	JP	2008-550558	10-Jul-2008	Pending
SYSTEMS AND METHODS FOR IMPROVING PERFORMANCE IN A DIGITAL AMPLIFIER BY ADDING ULTRASONIC SIGNAL TO AN INPUT AUDIO SIGNAL	CN	80002413.1	16-Jul-2008	Pending
SYSTEMS AND METHODS FOR IMPROVING PERFORMANCE IN A DIGITAL AMPLIFIER BY ADDING ULTRASONIC SIGNAL TO AN INPUT AUDIO SIGNAL	EP	07717294.8	31-Jul-2008	Pending
SYSTEMS AND METHODS FOR OVER- CURRENT PROTECTION	WO	PCT/07/61015	25-Jan- 2007	Pending
SYSTEMS AND METHODS FOR OVER- CURRENT PROTECTION	EP	07717391.2	25-Jan- 2007	Pending
SYSTEMS AND METHODS FOR OVER- CURRENT PROTECTION	JP	552565	11-Sep- 2008	Pending
SYSTEMS AND METHODS FOR OVER- CURRENT PROTECTION	CN	80003547.5	26-Nov- 2008	Pending
SYSTEMS AND METHODS FOR PULSE WIDTH MODULATING ASYMMETRIC SIGNAL LEVELS	WO	PCT/07/61399	31-Jan- 2007	Pending
SYSTEMS AND METHODS FOR PULSE WIDTH MODULATING ASYMMETRIC SIGNAL LEVELS	EP	07710437.0	31-Jan- 2007	Pending
SYSTEMS AND METHODS FOR PULSE WIDTH MODULATING ASYMMETRIC SIGNAL LEVELS	JP	08-552625	17-Sep- 2008	Pending
SYSTEMS AND METHODS FOR PULSE WIDTH MODULATING ASYMMETRIC SIGNAL LEVELS	CN	80004155.0	24-Nov- 2008	Pending
PWM FEEDBACK/FEEDFORWARD PROTECTION	WO	PCT/07/61769	07-Feb- 2007	Pending
PWM FEEDBACK/FEEDFORWARD PROTECTION	JP	2008-553549	07-Feb- 2007	Pending
PWM FEEDBACK/FEEDFORWARD PROTECTION	CN	200780005026	07-Feb- 2007	Pending
PWM FEEDBACK/FEEDFORWARD PROTECTION	EP	07756721.2	07-Feb- 2007	Pending
DIGITAL PWM AMPLIFIER WITH SIMULATION-BASED FEEDBACK	WO	PCT/06/62687	28-Dec- 2006	Pending
DIGITAL PWM AMPLIFIER WITH	CN	80053489.2	28-Dec-	Pending

Title	Jurisdiction	Reg. No./ Serial No.	Filing Date / Reg. Date	Status
SIMULATION-BASED FEEDBACK			2006	
DIGITAL PWM AMPLIFIER WITH SIMULATION-BASED FEEDBACK	EP	06846841.2	28-Dec- 2006	Pending
DIGITAL PWM AMPLIFIER WITH SIMULATION-BASED FEEDBACK	JP	2008-548859	28-Dec- 2006	Pending
SYSTEMS AND METHODS FOR CONTROLLING AUDIO VOLUME IN THE PROCESSOR OF A HIGH DEFINITION AUDIO CODEC	WO	US08/74963	01-Sep- 2008	Pending
SYSTEMS AND METHODS FOR CONTROLLING AUDIO VOLUME IN THE PROCESSOR OF A HIGH DEFINITION AUDIO CODEC	TW	97133404	01-Sep- 2008	Published
SYSTEMS AND METHODS FOR COMMUNICATION BETWEEN A PC APPLICATION AND THE DSP IN AN HDA AUDIO CODEC	TW	97133405	01-Sep- 2008	Pending
SYSTEMS AND METHODS FOR COMMUNICATION BETWEEN A PC APPLICATION AND THE DSP IN AN HDA AUDIO CODEC	WO	7S08/74964	01-Sep- 2008	Pending
SYSTEMS AND METHODS FOR BOOTING A CODEC PROCESSOR OVER A HIGH DEFINITION AUDIO BUS	TW	97133406	01-Sep- 2008	Pending
SYSTEMS AND METHODS FOR BOOTING A CODEC PROCESSOR OVER A HIGH DEFINITION AUDIO BUS	WO	US08/74965	01-Sep- 2008	Pending
SYSTEMS AND METHODS FOR SHADOWING AN HDA CODEC	TW	97133408	01-Sep- 2008	Pending
SYSTEMS AND METHODS FOR SHADOWING AN HDA CODEC	WO	US008/74966	01-Sep- 2008	Pending
SYSTEMS AND METHODS FOR CONTROLLING HDA SYSTEM CAPABILITIES	TW	97133410	01-Sep- 2008	Pending
SYSTEMS AND METHODS FOR CONTROLLING HDA SYSTEM CAPABILITIES	WO	US08/74967	01-Sep- 2008	Pending
SWITCHING AMPLIFIER OPTIMIZED FOR MINIMAL AND STABLE OUTPUT SEMICONDUCTOR DEAD TIMES	WO	08/83677	14-Nov- 2008	Pending
SWITCHING AMPLIFIER OPTIMIZED FOR MINIMAL AND STABLE OUTPUT SEMICONDUCTOR DEAD TIMES	TW	097144058	14-Nov- 2008	Pending

Planet ATE, Inc.

Title	Jurisdiction	Reg. No.	Reg. Date	Filing Date
Method and apparatus for coupling an	United States	US		

Title	Jurisdiction	Reg. No.	Reg. Date	Filing Date
input node to an output node		6933746	08/23/2005	Granted
Device under test power supply	United States	US 7675310	03/09/2010	Granted