



CODE. NO	PROJECT TITLES	YEAR
1)RENEWABLE ENERGY		
001	A Novel High Step-up DC/DC Converter Based on Integrating Coupled Inductor and Switched-Capacitor Techniques for Renewable Energy Applications	2015
002	Hybrid Transformer ZVS/ZCS DC–DC Converter With Optimized Magnetics and Improved Power Devices Utilization for Photovoltaic Module Applications	2015
003	Performance of Medium-Voltage DC-Bus PV System Architecture Utilizing High-Gain DC–DC Converter	2015
004	A Single Stage CCM Zeta Microinverter for Solar Photovoltaic AC Module	2015
005	Topology Review and Derivation Methodology of Single-Phase Transformerless Photovoltaic Inverters for Leakage Current Suppression	2015
006	A High Efficiency Flyback Micro-inverter With a New Adaptive Snubber for Photovoltaic Applications	2015
007	High Step-Up Converter With Three-Winding Coupled Inductor for Fuel Cell Energy Source Applications	2015
008	Optimized Operation of Current-Fed Dual Active Bridge DC-DC Converter for PV Applications	2015



009	Online Variable Topology-Type Photovoltaic Grid-Connected Inverter	2015
010	High-Gain Resonant Switched-Capacitor Cell-Based DC/DC Converter for Offshore Wind Energy Systems	2015
2) MICROGRID APPLICATIONS		
011	An Enhanced Islanding Microgrid Reactive Power, Imbalance Power, and Harmonic Power Sharing Scheme	2015
012	A Novel Integrated Power Quality Controller for Microgrid	2015
013	Power Control in AC Isolated Microgrids With Renewable Energy Sources and Energy Storage Systems	
3) VEHICULAR APPLICATIONS		
014	General Analysis and Design Guideline for a Battery Buffer System With DC/DC Converter and EDLC for Electric Vehicles and its Influence on Efficiency	2015
015	Reduced-Capacity Smart Charger for Electric Vehicles on Single-Phase Three-Wire Distribution Feeders With Reactive Power Control	2015
016	A Non isolated Multi input Multi output DC-DC Boost Converter for Electric Vehicle Applications	2015
017	New Interleaved Current-Fed Resonant Converter With Significantly Reduced High Current Side Output Filter for EV and HEV Applications	2015



4)DRIVES		
018	PFC Cuk Converter-Fed BLDC Motor Drive	2015
019	Variable-Form Carrier-Based PWM for Boost-Voltage Motor Driver With a Charge-Pump Circuit	2015
020	Sensorless Drive for High-Speed Brushless DC Motor Based on the Virtual Neutral Voltage	2015
021	Independent Control of Two Permanent-Magnet Synchronous Motors Fed by a Four-Leg Inverter	2015
022	Online Inverter Fault Diagnosis of Buck-Converter BLDC Motor Combinations	2015
023	A Unity Power Factor Bridgeless Isolated Cuk Converter-Fed Brushless DC Motor Drive	2015
5)CONVERTERS		
PFC,ZVS,ZCS,HIGH VOLTAGE, INTERLEAVED, SWITCHED CAPACITOR, BIDIRECTIONAL, MULTIPORT, MULTIPLE OUTPUT, RESONANT CONVERTERS, INVERTER, MULTI LEVEL INVERTER, AC TO AC CONVERTER		
024	Bridgeless PFC-Modified SEPIC Rectifier With Extended Gain for Universal Input Voltage Applications	2015
025	A Three-Level Quasi-Two-Stage Single-Phase PFC Converter with Flexible Output Voltage and Improved Conversion Efficiency	2015



026	Offline Soft-Switched LED Driver Based on an Integrated Bridgeless Boost–Asymmetrical Half-Bridge Converter	2015
027	Front-End Converter With Integrated PFC and DC–DC Functions for a Fuel Cell UPS With DSP-Based Control	2015
028	Loss-Free Resistor-Based Power Factor Correction Using a Semi-Bridgeless Boost Rectifier in Sliding-Mode Control	2015
029	A Novel Control Scheme of Quasi-Resonant Valley-Switching for High-Power-Factor AC-to-DC LED Drivers	2015
030	Power Factor Corrected Zeta Converter Based Improved Power Quality Switched Mode Power Supply	2015
031	Dual Active Bridge-Based Battery Charger for Plug-in Hybrid Electric Vehicle with Charging Current Containing Low Frequency Ripple	2015
032	A Novel Wall-Switched Step-Dimming Concept in LED Lighting Systems using PFC Zeta Converter	2015
033	Analysis and Design of Single-Switch Forward-Flyback Two-Channel LED Driver with Resonant-Blocking Capacitor	2015
034	Resonance Analysis and Soft-Switching Design of Isolated Boost Converter With Coupled Inductors for Vehicle Inverter Application	2015
035	An Adaptive ZVS Full-Bridge DC–DC Converter With Reduced Conduction Losses and Frequency Variation Range	2015
036	An Integrated High-Power-Factor Converter with ZVS Transition	2015

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037	A Novel Load Adaptive ZVS Auxiliary Circuit for PWM Three-Level DC–DC Converters	2015
038	Hybrid Modulated Extended Secondary Universal Current-Fed ZVS Converter for Wide Voltage Range: Analysis, Design, and Experimental Results	2015
039	Two-Stage Power Conversion Architecture Suitable for Wide Range Input Voltage	2015
040	Naturally Clamped Zero-Current Commutated Soft-Switching Current-Fed Push–Pull DC/DC Converter: Analysis, Design, and Experimental Results	2015
041	A Soft-Switched Asymmetric Flying Capacitor Boost Converter with Synchronous Rectification	2015
042	A High Gain Input-Parallel Output-Series DC/DC Converter With Dual Coupled Inductors	2015
043	Bidirectional PWM Converter Integrating Cell Voltage Equalizer Using Series-Resonant Voltage Multiplier for Series-Connected Energy Storage Cells	2015
044	Multicell Switched-Inductor/Switched-Capacitor Combined Active-Network Converters	2015
045	Reliability Evaluation of Conventional and Interleaved DC–DC Boost Converters	2015
046	A Novel Switched-Coupled-Inductor DC–DC Step-Up Converter and Its Derivatives	2015
047	A New Interleaved Three-Phase Single-Stage PFC AC–DC Converter With Flying Capacitor	2015



048	Ripple Minimization Through Harmonic Elimination in Asymmetric Interleaved Multiphase dc-dc Converters	2015
049	Analysis of the Interleaved Isolated Boost Converter With Coupled Inductors	2015
050	High Step-Up Interleaved Forward-Flyback Boost Converter With Three-Winding Coupled Inductors	2015
051	A Novel Transformer-less Interleaved Four-Phase Step-down DC Converter with Low Switch Voltage Stress and Automatic Uniform Current Sharing Characteristics	2015
052	Nonisolated High Step-Up DC–DC Converters Adopting Switched-Capacitor Cell	2015
053	A Family of High-Voltage Gain Single-Phase Hybrid Switched-Capacitor PFC Rectifiers	2015
054	A High-Efficiency Resonant Switched Capacitor Converter With Continuous Conversion Ratio	2015
055	A Cascade Point of Load DC-DC Converter with a Novel Phase Shifted Switched Capacitor Converter Output Stage	2015
056	Modeling Approaches for DC–DC Converters With Switched Capacitors	2015
057	A Zero-Voltage-Transition Bidirectional DC/DC Converter	2015
058	Steady-State Analysis of a ZVS Bidirectional Isolated Three Phase DC-DC Converter Using Dual Phase-Shift Control with Variable Duty Cycle	2015
059	Novel High-Conversion-Ratio High-Efficiency Isolated Bidirectional DC–DC Converter	2015

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060	DC–DC Converter for Dual-Voltage Automotive Systems Based on Bidirectional Hybrid Switched-Capacitor Architectures	2015
061	A Novel PWM High Voltage Conversion Ratio Bi-Directional Three-Phase DC/DC Converter with Y- Δ Connected Transformer	2015
062	Performance Analysis of Bi-directional DC-DC Converters for Electric Vehicles	2015
063	A Nonisolated Three-Port DC–DC Converter and Three-Domain Control Method for PV-Battery Power Systems	2015
064	A Power Decoupling Method Based on Four-Switch Three-Port DC/DC/AC Converter in DC Microgrid	2015
065	Three-Port DC–DC Converter for Stand-Alone Photovoltaic Systems	2015
066	A Family of Multiport Buck–Boost Converters Based on DC-Link-Inductors (DLIs)	2015
067	An Isolated Three-Port Bidirectional DC-DC Converter for Photovoltaic Systems with Energy Storage	2015
068	A High Step-Down Multiple Output Converter With Wide Input Voltage Range Based on Quasi Two-Stage Architecture and Dual-Output <i>LLC</i> Resonant Converter	2015
069	Single-Inductor Dual-Output Buck–Boost Power Factor Correction Converter	2015
070	Hybrid Phase-Shift-Controlled Three-Level and <i>LLC</i> DC–DC Converter With Active Connection at the Secondary Side	2015

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071	Analysis and Design of <i>LLC</i> Resonant Converters With Capacitor–Diode Clamp Current Limiting	2015
072	A Secondary-Side Phase-Shift-Controlled <i>LLC</i> Resonant Converter With Reduced Conduction Loss at Normal Operation for Hold-Up Time Compensation Application	2015
073	Optimal Design Methodology for <i>LLC</i> Resonant Converter in Battery Charging Applications Based on Time-Weighted Average Efficiency	2015
074	Discontinuous Modulation Scheme for a Differential-Mode Cuk Inverter	2015
075	A High-Efficiency MOSFET Transformerless Inverter for Nonisolated Microinverter Applications	2015
076	A Multilevel Energy Buffer and Voltage Modulator for Grid-Interfaced Microinverters	2015
077	Extended Boost Active-Switched-Capacitor/ Switched-Inductor Quasi-Z-Source Inverters	2015
078	Grid-Connected Forward Microinverter With Primary-Parallel Secondary-Series Transformer	2015
079	Minimization of the DC Component in Transformerless Three-Phase Grid-Connected Photovoltaic Inverters	2015
080	Single Inductor Dual Buck Full-Bridge Inverter	2015
081	A Single-Phase Cascaded Multilevel Inverter Based on a New Basic Unit With Reduced Number of Power Switches	2015
082	Analytical Model of the Half-Bridge Series Resonant Inverter for Improved Power Conversion Efficiency and	2015



	Performance	
083	A Bridgeless BHB ZVS-PWM AC-AC Converter for High-Frequency Induction Heating Applications	2015
084	Multi-MOSFET-Based Series Resonant Inverter for Improved Efficiency and Power Density Induction Heating Applications	2014
085	Novel Single-Phase PWM AC-AC Converters Solving Commutation Problem Using Switching Cell Structure and Coupled Inductor	2015
086	Soft-Switching AC-Link Three-Phase AC-AC Buck-Boost Converter	2015
087	Ultra sparse AC-Link Converters	2015
6)POWER SYSTEM		
088	An Adaptive Power Oscillation Damping Controller by STATCOM With Energy Storage	2015
089	New Control of PV Solar Farm as STATCOM (PV-STATCOM) for Increasing Grid Power Transmission Limits During Night and Day	2015
090	A New Control Strategy for Distributed Static Compensators Considering Transmission Reactive Flow Constraints	2015
091	A Voltage-Controlled DSTATCOM for Power-Quality Improvement	2014

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092	An Improved Hybrid DSTATCOM Topology to Compensate Reactive and Nonlinear Loads	2014
093	The Transformerless Single-Phase Universal Active Power Filter for Harmonic and Reactive Power Compensation	2014
094	An Enhanced Voltage Sag Compensation Scheme for Dynamic Voltage Restorer	2015
095	An Improved iUPQC Controller to Provide Additional Grid-Voltage Regulation as a STATCOM	2015
096	A Grid-Connected Dual Voltage Source Inverter With Power Quality Improvement Features	2015
097	Transformerless Hybrid Power Filter Based on a Six-Switch Two-Leg Inverter for Improved Harmonic Compensation Performance	2015
098	A New Railway Power Flow Control System Coupled With Asymmetric Double <i>LC</i> Branches	2015
099	Analysis of DC Link Operation Voltage of a Hybrid Railway Power Quality Conditioner and its PQ Compensation Capability in High Speed Co-phase Traction Power Supply	2015
100	A Systematic Approach to Hybrid Railway Power Conditioner Design With Harmonic Compensation for High-Speed Railway	2015