505093500 09/13/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GENERAL ELECTRIC COMPANY	07/20/2018

RECEIVING PARTY DATA

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Postal Code:	CH-5400

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15263841

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NAME OF SUBMITTER:	JOSHUA P. LARSEN
SIGNATURE:	/Joshua P. Larsen/
DATE SIGNED:	09/13/2018

Total Attachments: 43

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PATENT 505093500 REEL: 047325 FRAME: 0271

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PATENT REEL: 047325 FRAME: 0272

ASSIGNMENT

Pursuant to the Stock and Asset Purchase Agreement (hereinafter, "SAPA"), dated September 24, 2017, by and between General Electric Company and ABB Verwaltungs Ltd (and, solely for the purposes of Section 14.23 thereof, ABB Ltd), and for good and valuable consideration, the receipt of which is hereby acknowledged, GENERAL ELECTRIC COMPANY of 1 River Road, Schenectady, New York 12345 (hereinafter, "Assignor") does hereby sell, convey, assign, transfer, and deliver to ABB SCHWEIZ AG, of Brown Boveri Strasse 6, CH-5400, Baden, Switzerland (hereinafter, "Assignee"), who accepts, the entire right, title, and interest in, to, and under: (i) all patents, patent applications, statutory invention registrations, and invention disclosures constituting Company Intellectual Property (as that term is defined in the SAPA), including those listed in the attached Exhibit; (ii) all inventions disclosed in the patents, patent applications, statutory invention registrations, and invention disclosures of clause (i); and (iii) all patents, patent applications, and statutory invention registrations directed to any of the inventions of clause (ii) (the subject matter of clauses (i), (ii), and (iii) being hereinafter collectively referred to as the "Assigned Patent Properties"), including the right to sue for past infringement of any and all of the Assigned Patent Properties and the right to collect any and all damages for such infringement.

Assignor agrees to execute any and all papers to be filed or recorded in connection with any of the Assigned Patent Properties, including any separate assignments of any of the Assigned Patent Properties, that the Assignee may deem necessary or desirable.

Assignor hereby consents to a unilateral application for recordation of the assignment solely by Assignee.

Assignor grants Assignee's counsel (including any attorney of record for any of the Assigned Patent Properties) the power to insert on this Assignment any further identification of any of the Assigned Patent Properties that may be necessary or desirable for the filing and/or recordation of this document.

By: GENERAL ELECTRIC COMPANY

Signed:		JAG Jago	er-property	
Title:	Deryk HESFORD	<u>Dood Lane</u>	17 marka	GPO
Dated:	2.0	17/16		

EXHIBIT

Country	Pat. / Appl. No.	Title	Appl. Date
US	6082895	THERMISTOR	9/18/1998
US	6252492	CONDITION-RESPONSIVE ELECTRIC	3/18/1999
		SWITCH MECHANISM	
US	6239523	CUTOUT START SWITCH	7/1/1999
US	6249104	CUTOUT START SWITCH HEATING	7/1/1999
US	6380487	CIRCUIT BOARD PROTECTION	7/26/2000
		SYSTEM AND METHOD	
US	6968277	POWER LINE MONITORING AND	1/16/2002
		INTERRUPT METHOD AND	
		APPARATUS	
US	6972936	PRE-EMPTIVE CIRCUIT BREAKER	3/29/2002
		WITH ARC FAULT AND FAULT	
		LOCKOUT SHORT CIRCUIT	
· · · · · · · · · · · · · · · · · · ·		PROTECTION	
US	6798209	CIRCUIT BREAKER WITH INTEGRAL	1/17/2002
		TESTING UNIT	
US	6700769	CARRIER ASSEMBLY FOR MULTIPLE	7/26/2001
		PIN INSERTION	
US	6433279	FIELD OR FACTORY INSTALLABLE	4/4/2001
		PADLOCK AND SEALING DEVICE	
US	6512192	EXHAUST ARC GAS MANIFOLD	10/2/2001
US	6853530	APPARATUS AND METHOD FOR	9/15/2000
		ACTUATING A MECHANICAL DEVICE	
US	6849811	METHODS AND APPARATUS FOR	7/31/2000
		TRANSFER SWITCH	
US	6909942	METHOD FOR POWER DISTRIBUTION	2/25/2003
		SYSTEM COMPONENTS	
		IDENTIFICATION,	
		CHARACTERIZATION AND RATING	
US	7301738	METHOD AND APPARATUS FOR	2/25/2003
		MINIMALLY INVASIVE NETWORK	1 1 1 1 1 1
	× × × × × × × × × × × × × × × × × × ×	MONITORING	* In a large to
US	6892145	METHOD AND SYSTEM FOR	2/25/2003
		CONDITIONALLY TRIGGERED	
**************************************	70.00.010	SYSTEM DATA CAPTURE	0/07/0007
US	7068612	METHOD FOR COMMUNICATING	2/25/2003
		INFORMATION BUNDLED IN DIGITAL	
TEC	(000115	MESSAGE PACKETS	2/25/2022
US	6892115	METHOD AND APPARATUS FOR	2/25/2003
		OPTIMIZED CENTRALIZED CRITICAL	
		CONTROL ARCHITECTURE FOR	
		SWITCHGEAR AND POWER	
	<u> </u>	EQUIPMENT	<u> </u>

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Country	Pat. / Appl. No.	Title	Appl. Date
US	6999291	METHOD AND APPARATUS FOR NODE ELECTRONICS UNIT	2/25/2003
		ARCHITECTURE	
US	7111195	METHOD AND SYSTEM FOR	2/25/2003
	111111111111111111111111111111111111111	EXTERNAL CLOCK TO OBTAIN	10,100,100,000
		MULTIPLE SYNCHRONIZED	
		REDUNDANT COMPUTERS	
US	7117105	METHOD AND APPARATUS FOR	2/25/2003
ω,	14.47.402	GROUND FAULT PROTECTION	3 , 3 , 3 , 3
US	7151329	INTEGRATED PROTECTION,	2/25/2003
	. 101020	MONITORING, AND CONTROL	2,20,20
		SYSTEM	
US	7043340	PROTECTION SYSTEM FOR POWER	2/25/2003
	, , , , , , , , , , , , , , , , , , , ,	DISTRIBUTION SYSTEMS	2, 23, 23, 02
US	7747356	INTEGRATED PROTECTION,	11/20/2006
	,,,,,,,,,	MONITORING, AND CONTROL	11,20,2000
		SYSTEM	
US	7269201	TIME-DELAYED TRANSMITTED	10/9/2003
		REFERENCE SPREAD SPECTRUM	
		TRANSMITTER WITH DIGITAL NOISE	
		GENERATOR	
US	7453052	ELECTRICAL DISTRIBUTION	11/21/2005
		APPARATUS WITH CONTROLLED	
		COOLING	
US	6865073	PANELBOARD METERING	3/6/2003
		ARRANGEMENT AND METHOD OF	
		ASSEMBLY THEREOF	
US	6934147	SWITCHGEAR CONDUCTORS AND	1/26/2004
		CONNECTIONS THEREFORE	
US	7362696	METHOD AND APPARATUS FOR	10/21/2002
		AUTOMATIC TRANSFER SWITCH	
US	7075310	DEVICE AND METHOD FOR TESTING	6/9/2004
		FOR A WIRING FAULT CONDITION	
US	7062388	SERIES ARC DETECTION	3/18/2004
US	6747532	METHOD, SYSTEM AND APPARATUS	12/23/2002
		FOR EMPLOYING NEUTRAL POLES IN	
		MULTIPOLE CIRCUIT BREAKERS	
US	6985784	CONFIGURING A CENTRALLY	2/25/2003
		CONTROLLED CIRCUIT BREAKER	1
		PROTECTION SYSTEM	
US	7068483	CIRCUIT BREAKER LOCKOUT	2/25/2003
US	7254001	CIRCUIT PROTECTION SYSTEM	2/25/2003
US	8213144	CIRCUIT PROTECTION SYSTEM	6/20/2007
US	6750743	INTEGRATED THERMAL AND	5/13/2003
		MAGNETIC TRIP UNIT	† † †

Country	Pat. / Appl. No.	Title	Appl. Date
US	6940032	METHOD AND APPARATUS FOR	1/12/2004
		ACHIEVING THREE POSITIONS	
US	6972649	METHOD AND APPARATUS FOR	1/7/2005
		SHIELDING AND ARMATURE FROM	
		A MAGNETIC FLUX	
US	7161454	APPARATUS AND METHOD FOR	8/21/2003
		COOLING ELECTRICAL	
		TRANSFORMERS	
US	7026894	METHOD AND APPARATUS FOR	3/4/2004
		MAGNETICALLY TRIPPING CIRCUIT	
		BREAKERS	
US	7154361	ACCESSORIES FOR A ROTATABLE	5/4/2005
		LATCHING SHAFT OF A CIRCUIT	
		BREAKER	
US	7112951	MEMS BASED CURRENT SENSOR	6/7/2004
		USING MAGNETIC-TO-MECHANICAL	
		CONVERSION AND REFERENCE	
		COMPONENTS	
US	7315161	MICRO-ELECTROMECHANICAL	5/13/2005
		SYSTEM (MEMS) BASED CURRENT	
		AND MAGNETIC FIELD SENSOR	
		HAVING CAPACITIVE SENSE	
		COMPONENTS	
US	7221144	MICRO-ELECTROMECHANICAL	11/30/2005
		SYSTEM (MEMS) BASED CURRENT	
		AND MAGNETIC FIELD SENSOR	
***************************************		HAVING IMPROVED SENSITIVITIES	
US	7466121	MEMS BASED CURRENT SENSOR	8/18/2006
		USING MAGNETIC-TO-MECHANICAL	3 3 5 5 5
		CONVERSION AND REFERENCE	
		COMPONENTS	
US	7495430	MEMS BASED CURRENT SENSOR	8/18/2006
		USING MAGNETIC-TO-MECHANICAL	
		CONVERSION AND REFERENCE	
		COMPONENTS	
US	7508189	MICRO-ELECTROMECHANICAL	4/11/2007
		SYSTEM (MEMS) BASED CURRENT	b b c c c c c c c c c c
		AND MAGNETIC FIELD SENSOR	
		HAVING IMPROVED SENSITIVITIES	
US	7741832	MICRO-ELECTROMECHANICAL	4/18/2007
		SYSTEM (MEMS) BASED CURRENT	
		AND MAGNETIC FIELD SENSOR	
		USING TUNNELING CURRENT	
		SENSING	

Country	·	Title	Appl. Date
US	7901970	MICRO-ELECTROMECHANICAL	11/14/2007
		SYSTEM (MEMS) BASED CURRENT	
		AND MAGNETIC FIELD SENSOR	
		HAVING CAPACITIVE SENSE	
		COMPONENTS	
US	6778048	CIRCUIT BREAKER INTERFACE	5/13/2003
		MECHANISM FOR BELL ALARM	
		SWITCH	
US	6842096	CIRCUIT BREAKER MAGNETIC TRIP	5/13/2003
		ASSEMBLY	
US	6903635	CIRCUIT BREAKER INTERFACE	5/13/2003
		MECHANISM FOR AUXILIARY	
		SWITCH ACCESSORY	
US	6952149	APPARATUS FOR INTERRUPTING A	5/13/2003
		SHORT CIRCUIT IN A CIRCUIT	0, 10,120,00
		BREAKER	
US	6933814	PHASE-TO-PHASE ISOLATION OF	5/13/2003
	0,555,7	CASSETTE TYPE CIRCUIT BREAKERS	3/13/2003
US	6930577	CIRCUIT BREAKER LUG COVER AND	9/15/2003
0,0	0,500,7	GASKET	211312003
US	6965292	ISOLATION CAP AND BUSHING FOR	8/29/2003
UU	0203232	CIRCUIT BREAKER ROTOR	0/29/2003
		ASSEMBLY	
US	6985059	CIRCUIT BREAKER HANDLE BLOCK	9/10/2003
US	6822543	SYSTEM AND METHOD FOR	· · · · · · · · · · · · · · · · · · ·
US	0022343	CONTROLLING TRIP UNIT	9/24/2003
3,163	7.03.0.573.	MECHANICAL STRESS	2 (20) (20)
US	6930573	INTERLOCKING CASSETTES FOR	8/29/2003
T. F.CV	7070400	DIMENSIONAL STABILITY	0/05/0000
US	7058482	DATA SAMPLE AND TRANSMISSION	2/25/2003
		MODULES FOR POWER	
* * * * * * * * * * * * * * * * * * * *		DISTRIBUTION SYSTEMS	
US	7532955	DISTRIBUTED PROTECTION SYSTEM	8/15/2005
		FOR POWER DISTRIBUTION	
		SYSTEMS	
US	7636616	PROTECTION SYSTEM FOR POWER	4/13/2006
		DISTRIBUTION SYSTEMS	
US.	7221246	SPLIT ROTOR SYSTEM AND METHOD	1/7/2005
		WITH SPRINGS	-
US	8171543	ELECTRONIC TRIP UNITS WITH	8/29/2007
		LIMITED READ/WRITE ACCESS	
US	7747354	CIRCUIT PROTECTION SYSTEM	9/15/2003
US	7986503	CIRCUIT PROTECTION SYSTEM	9/15/2003
US	7012421	ENERGY CALCULATION METHODS	9/15/2003
	,	IN POWER DISTRIBUTION SYSTEMS	2. 22. 2002

Country	Pat. / Appl. No.	Title	Appl. Date
US	6847297	LOCATOR DEVICES AND METHODS	9/15/2003
		FOR CENTRALLY CONTROLLED	
		POWER DISTRIBUTION SYSTEMS	
US	7262943	CONFIGURATION UNIT AND	9/15/2003
		METHODS FOR CONFIGURING	
		CENTRALLY CONTROLLED POWER	
	4 1 1 1	DISTRIBUTION SYSTEMS	
US	7372177	CONTROL SYSTEM, METHOD AND	9/15/2005
		PRODUCT FOR UNINTERRUPTIBLE	
		POWER SUPPLY	
US	7252543	METHODS AND SYSTEMS FOR	12/8/2004
		MEASURING SYSTEM LOADS AND	
		SUB-METERING ELECTRIC POWER	
		DISTRIBUTION	
US	7180300	SYSTEM AND METHOD OF	12/10/2004
	4.2.2.2	LOCATING GROUND FAULT IN	2,27, 20, 200, 1
		ELECTRICAL POWER DISTRIBUTION	
		SYSTEM	
US	7859811	MODULAR COMMUNICATION PLUG-	9/19/2007
0.0	1005012	IN MODULE FOR AN ELECTRONIC	3,13,2007
		TRIP UNIT	
US	7304829	APPARATUS AND METHOD FOR	2/16/2005
OD	7501025	FILTERING CURRENT SENSOR	2/10/2000
		OUTPUT SIGNALS	
US	7535686	CONTROL OF CIRCUIT BREAKERS IN	6/8/2005
O.a.	7555000	A MULTI-PHASE POWER SYSTEM	0/8/2003
US	7826932	SYSTEMS AND METHODS FOR	12/10/2004
U.D.	7620952	UPDATING GRAPHICAL	12/10/2004
		REPRESENTATIONS ON MULTIPLE	
		INTERFACE DEVICES	
US	7433170	APPARATUS AND METHOD OF	11/17/2005
US	7433170	CONTROLLING THE CLOSING	1.1/1.7/2003
	4 4 9 9	ACTION OF A CONTACTOR	
TTO	C051000		11/20/2004
US	6951990	APPARATUS FOR RACKING CIRCUIT	11/29/2004
		BREAKERS INTO AND OUT OF	
Y IO	9050000	SWITCHGEAR	10/24/0010
US	8050000	MICRO-ELECTROMECHANICAL	12/14/2010
		SYSTEM BASED ARC-LESS	
		SWITCHING WITH CIRCUITRY FOR	
		ABSORBING ELECTRICAL ENERGY	
T FO	mencoco	DURING A FAULT CONDITION	10/00/000
US	7576963	CIRCUIT PROTECTION SYSTEM	12/28/2006
US	8754544	APPARATUS FOR SYNCHRONIZING	11/22/2005
		UNINTERRUPTIBLE POWER	
		SUPPLIES	

Country	Pat. / Appl. No.	Title	Appl. Date
US	7456520	CONTROL SYSTEM, METHOD AND	3/31/2005
		PRODUCT FOR UNINTERRUPTIBLE	
		POWER SUPPLY	
US	7302036	SYSTEMS AND METHODS FOR NON-	12/9/2005
		INTRUSIVE INSPECTIONS OF HIGH-	
		VOLTAGE CIRCUIT BREAKERS	
US	7375989	AC/DC CONVERTER AND METHOD	9/28/2005
		OF MODULATION THEREOF))))
US	7474081	AC/DC CONVERTER AND METHOD	9/28/2005
		OF MODULATION THEREOF	
US	7061349	CIRCUIT BREAKER CONFIGURED TO	3/24/2005
		BE REMOTELY OPERATED	
US	7342474	CIRCUIT BREAKER CONFIGURED TO	11/16/2005
		BE REMOTELY OPERATED	
US	7019606	CIRCUIT BREAKER CONFIGURED TO	3/28/2005
		BE REMOTELY OPERATED	
US	7298606	APPARATUS FOR INTERFACING	3/24/2005
		REMOTE OPERATED AND NON-	
		REMOTE OPERATED CIRCUIT	
		BREAKERS WITH AN ELECTRICAL	
		PANEL	
US	7468566	AUTOMATIC TRANSFER SWITCH	11/21/2005
		APPARATUS	
US	7453256	MICRO-ELECTROMECHANICAL	2/16/2006
		SYSTEM (MEMS) BASED CURRENT	
		AND MAGNETIC FIELD SENSOR	
US	7705583	MICRO-ELECTROMECHANICAL	10/15/2008
		SYSTEM (MEMS) BASED CURRENT	
		AND MAGNETIC FIELD SENSOR	
US	7599161	RELAY DEVICE AND	12/29/2006
		CORRESPONDING METHOD	
US	7652871	METHODS AND SYSTEMS FOR	1/4/2006
		ELECTRICAL POWER SUB-METERING	
US	7405369	INTERLOCK APPARATUS AND	8/8/2005
		METHOD FOR DISCONNECT	
	1	SWITCHES	
US	7189935	CONTACT ARM APPARATUS AND	12/8/2005
		METHOD OF ASSEMBLY THEREOF	
US	7369389	ELECTRONIC TRIP UNIT FOR	12/8/2005
		CIRCUIT BREAKERS	
US	7839617	ELECTRONIC TRIP UNIT FOR	3/31/2008
-		CIRCUIT BREAKERS	
US	7589625	WIRELESS SYSTEM WITH MULTI-	12/20/2005
→ 		DEVICE CONTROL	

REEL: 047325 FRAME: 0279

Country	Pat. / Appl. No.	Title	Appl. Date
US	8032260	METHOD AND SYSTEM FOR	11/30/2005
		CONTROLLING A POWER	
		DISTRIBUTION SYSTEM	
US	7517235	PRESS FIT CONNECTION FOR	12/28/2006
		MOUNTING ELECTRICAL PLUG-IN	
		OUTLET INSULATOR TO A BUSWAY	
		ALUMINUM HOUSING	
US	7732948	PORTABLE ENERGY DEVICE	10/18/2006
US	7430482	WAVEFORM RECORDER APPARATUS	12/21/2005
		AND METHOD	
US	8363389	SWITCHBOARD WITH UPS AND	9/9/2010
		HORIZONTAL BUSBARS	
US	7936547	CIRCUIT BREAKER ELECTRONIC	12/4/2007
		TRIP UNIT PERSONALITY MODULE	
US	7463989	WAVEFORM RECORDER APPARATUS	12/21/2005
		AND METHOD	
US	7751165	CENTRALLY CONTROLLED	12/26/2007
		PROTECTION SYSTEMS HAVING	
		REDUCED ENERGY LET-THROUGH	
		MODE	
US	7750646	DETECTOR FOR PRECURSIVE	1/10/2008
		DETECTION OF ELECTRICAL ARC	
US	7446270	INTERLOCK ASSEMBLIES FOR	12/28/2006
		CIRCUIT BREAKERS	
US	7493221	SYSTEM FOR POWER SUB-METERING	9/28/2006
US	7546214	SYSTEM FOR POWER SUB-METERING	6/8/2007
US	7542256	RELAY DEVICE AND	12/29/2006
		CORRESPONDING METHOD	
US	7540792	SWITCHING APPARATUS	8/7/2006
US	7875822	ABLATIVE-BASED MULTIPHASE	1/10/2008
		CURRENT INTERRUPTER	
US	7800007	CIRCUIT BREAKER SUBASSEMBLY	6/26/2007
		APPARATUS	
US	8228653	CIRCUIT BREAKERS WITH	12/6/2007
		AUTOMATIC BREAKER RATING	
US	7542250	MICRO-ELECTROMECHANICAL	1/10/2007
		SYSTEM BASED ELECTRIC MOTOR	
		STARTER	
US	7378837	METHOD AND SYSTEM FOR	1/3/2007
		CALIBRATING A MICRO-	
		ELECTROMECHANICAL SYSTEM	
		(MEMS) BASED SENSOR USING	
		TUNNELING CURRENT SENSING	
US	7633365	CIRCUIT BREAKER APPARATUS	6/28/2007

Country	Pat. / Appl. No.	Title	Appl. Date
US	7550872	CURRENT SENSOR APPARATUS AND	12/19/2006
		METHOD FOR UNINTERRUPTIBLE	
		POWER SUPPLY	
US	7790996	STATUS INDICATION FOR	7/12/2007
		EMERGENCY STOP PUSH BUTTON	
US	7790996	STATUS INDICATION FOR	7/12/2007
		EMERGENCY STOP PUSH BUTTON	
US	7821749	ARC FLASH ELIMINATION	3/30/2007
		APPARATUS AND METHOD	
US	7929260	ARC FLASH ELIMINATION SYSTEM,	8/30/2007
		APPARATUS, AND METHOD	
US	7384317	MULTI-TERMINAL BLOCK FOR	12/21/2006
		ELECTRONIC DEVICES HAVING	
		SUPERIMPOSED CONDUCTOR	
		CONNECTING LEVELS	
US	7515025	CURRENT TRIP UNIT FOR CIRCUIT	12/20/2006
0.5	7545025	BREAKER	12.20.2000
US	8183964	CURRENT TRIP UNIT FOR CIRCUIT	2/18/2009
0.0	0103901	BREAKER	2/10/2003
US	8742282	ABLATIVE PLASMA GUN	4/16/2007
US	7903382	MEMS MICRO-SWITCH ARRAY	6/19/2007
U,S	7903302	BASED ON CURRENT LIMITING	0/19/2007
		ENABLED CIRCUIT INTERRUPTING	
		APPARATUS	
US	7508653	LOAD CENTER WITH PLUG IN	12/27/2006
US	7300033	NEUTRAL CONNECTIONS	12/27/2000
US	7463465	SERIES ARC FAULT CURRENT	12/28/2006
US	/403403	1	12/28/2000
T TO:	789/104	INTERRUPTERS AND METHODS	10/20/2000
US	7826184	SERIES ARC FAULT INTERRUPTERS	10/29/2008
Trei	7074004	AND METHODS	10/20/2006
US	7864004	ACTIVATION FOR SWITCHING	12/29/2006
7 707	77.11.703	APPARATUS	1000000
US	7561393	CIRCUIT PROTECTION SYSTEM	12/28/2006
US	7692903	APPARATUS AND METHOD FOR	12/20/2007
		CONTROLLING A CIRCUIT BREAKER	
		TRIP DEVICE	
US	8144445	MICRO-ELECTROMECHANICAL	6/12/2007
		SYSTEM BASED SWITCHING	
US	7944660	MICRO-ELECTROMECHANICAL	6/15/2007
		SYSTEM BASED SELECTIVELY	
		COORDINATED PROTECTION	
		SYSTEMS AND METHODS FOR	
		ELECTRICAL DISTRIBUTION	
US	7589942	MEMS BASED MOTOR STARTER	6/15/2007
		WITH MOTOR FAILURE DETECTION	

Country	Pat. / Appl. No.	Title	Appl. Date
US	7508096	SWITCHING CIRCUIT APPARATUS	9/20/2007
	-	HAVING A SERIES CONDUCTION	
		PATH FOR SERVICING A LOAD AND	
		SWITCHING METHOD	
US	7655876	METHOD AND APPARATUS FOR	10/5/2007
		SENSING CONTACT POSITION	
US	7580232	ARC DETECTION SYSTEM AND	12/21/2007
		METHOD	
US	8563888	ARC CONTAINMENT DEVICE AND	6/11/2008
		METHOD	
US	8809705	DEVICE AND METHOD FOR	12/4/2007
		SWITCHING ELECTRICAL ENERGY	
US	7566840	CONTACT ARM MECHANISM FOR	10/4/2007
		CIRCUIT BREAKER	
US	8053699	ELECTRICAL PULSE CIRCUIT	11/27/2007
US	7911302	SECONDARY TRIP SYSTEM FOR	11/15/2007
		CIRCUIT BREAKER	
US	8168911	CIRCUIT BREAKER WITH IMPROVED	9/19/2008
		ARC QUENCHING	
US	7802037	CONTROL OF AN ACTUATOR-	11/5/2008
		SENSOR-INTERFACE COMPATIBLE	
		DEVICE USING A REMOTE	
		INTELLIGENCE DEVICE	
US	7973625	TOOL FREE CONTACT BLOCK	6/5/2008
US	8383969	APPARATUS INCLUDING A CIRCUIT	8/26/2008
		BREAKER RETAINING MECHANISM	
		FOR USE IN WITHDRAWABLE	
		CIRCUIT BREAKERS AND METHOD	
		OF OPERATING THE SAME	
US	7911768	DRAWOUT DOOR INTERFACE FOR	8/12/2008
		CIRCUIT BREAKER	
US	8119943	DRAW-OUT MECHANISM FOR	8/29/2008
		MOLDED CASE CIRCUIT BREAKERS	
US	8139336	FIELD CONFIGURABLE RATING	12/24/2008
		PLUG USING COMMUNICATION AND	
		CONTROL SIGNAL	
US	7986505	DUAL POWER SOURCE PULSE	9/3/2008
		GENERATOR FOR A TRIGGERING	
	•	SYSTEM	
US	8154843	DUAL POWER SOURCE PULSE	6/27/2011
	= # · # · #	GENERATOR FOR A TRIGGERING	J
		SYSTEM	
US	8054591	ARC DETECTION USING DISCRETE	7/24/2008
<u></u>	, , , , , , , , , , , , , , , , , , ,	WAVELET TRANSFORMS	772 172000

Country	Pat. / Appl. No.	Title	Appl. Date
US	7791846	ARC FLASH DETECTION SYSTEM,	7/30/2008
		APPARATUS AND METHOD	
US	7965483	ELECTRONIC TRIP UNIT OF A	9/12/2008
		CIRCUIT BREAKER	
US	7821775	RACKING MECHANISM FOR A	4/15/2008
		CIRCUIT BREAKER	
US	7764485	ELECTRICAL DISTRIBUTION DEVICE	4/15/2008
		ASSEMBLY	, <u>23.7.2</u> -0,00
US	7863534	SPRING DISCHARGE MECHANISM	4/15/2008
		FOR CIRCUIT BREAKER	,
US	7834724	ELECTROMECHANICAL INTERLOCK	4/15/2008
	, 03 17.2	FOR ELECTRICAL PROTECTION	. 13.12000
		DEVICES	
US	7834281	DRAW OUT CIRCUIT BREAKER	4/15/2008
OB	7007201	ASSEMBLY HAVING A TELESCOPIC	4/15/2006
		RACKING HANDLE	
US	7935902	CONTACT ASSEMBLY OF CIRCUIT	4/15/2008
OU	1755702	BREAKER	7013/2000
US	8592709	CURRENT PATH ARRANGEMENT FOR	4/15/2008
OD.	0372102	A CIRCUIT BREAKER	7/15/2000
US	7705263	ARC CHUTE ASSEMBLY FOR A	4/15/2008
QB	7705205	CIRCUIT BREAKER	4/13/2006
US	7906740	READINESS FOR CLOSING	4/15/2008
US	7900740	INDICATOR FOR CIRCUIT BREAKERS	4/15/2006
US	7795551	RACKING OF ELECTRICAL	4/15/2008
US	7793331	DISTRIBUTION DEVICES	4/13/2008
US	707 1800		7/20/3009
UB	7964809	CAM OPERATED SPRING DISCHARGE	7/29/2008
TTO	7663867	INTERLOCK MECHANISM	3/15/2000
US	/00380/	SECONDARY CIRCUIT TERMINAL	4/15/2008
		BLOCK DESIGN FOR FIXED TYPE	
T T C	703.0330	CIRCUIT BREAKERS	1/15/2000
US	7936239	BREAKER INTERLOCK SYSTEM AND	4/15/2008
	7514000	METHOD	10/3/2000
US	7718908	CONTACT ARM ASSEMBLY AND	10/1/2008
		METHOD FOR ASSEMBLING THE	
***************************************		CONTACT ARM ASSEMBLY	
US	8089789	METHOD AND SYSTEM FOR	11/6/2008
		MANAGING UNINTERRUPTABLE	
		POWER SUPPLY FOR HARMONIC	
		REDUCTION	
US	8144438	MOTOR CONTROL CENTER	10/3/2008
		COMMUNICATION SYSTEM	
US	8023238	UNIVERSAL TRIP UNIT	4/15/2008
US	8054592	ARC FAULT DETECTION USING	10/3/2008
		FUZZY LOGIC	

Country	Pat. / Appl. No.	Title	Appl. Date
US	8223466	ARC FLASH DETECTION	6/30/2009
US	7995315	GROUND FAULT PROTECTION	7/14/2008
		CIRCUIT FOR MULTI-SOURCE	
		ELECTRICAL DISTRIBUTION SYSTEM	
US	8749327	CIRCUIT INTERRUPTER TRIP	9/18/2008
		APPARATUS AND METHOD	
US	8018092	SYSTEM AND METHOD FOR	4/15/2008
		MANAGING POWER SUPPLY TO A	
		CIRCUIT BREAKER CONTROL UNIT	
US	8014115	CIRCUIT BREAKER HAVING	4/15/2008
		SEPARATE RESTRAINED AND	
		UNRESTRAINED ZONE SELECTIVE	
		INTERLOCK SETTING CAPABILITY	
UŞ	8213138	CIRCUIT BREAKER WITH ARC FAULT	8/8/2008
		DETECTION AND METHOD OF	
		OPERATION	
US	8270136	CIRCUIT BREAKER ZONE SELECTIVE	4/15/2008
		INTERLOCK FOR DIFFERENTIATED	
		FAULTS AND METHOD OF	
		OPERATION	
US	8390973	CIRCUIT BREAKER ZONE SELECTIVE	8/9/2012
		INTERLOCK FOR DIFFERENTIATED	
		FAULTS AND METHOD OF	
		OPERATION	
US	7927155	SECONDARY DISCONNECT FOR	9/11/2008
		CIRCUIT BREAKER DRAWOUT	
		SYSTEM	
US	8120886	CIRCUIT BREAKER CLOSING	9/4/2008
		ACTUATOR AND METHOD OF	
		OPERATION	
US	8159793	ARC DETECTION USING DETAILED	12/22/2008
		AND APPROXIMATE COEFFICIENTS	
		FROM DISCRETE WAVELET	
		TRANSFORMS	
US	8163998	ELECTRICAL BUSWAY FLANGE END	9/11/2008
- 14		STUB	
US	8548638	ENERGY MANAGEMENT SYSTEM	2/18/2009
5.1 VE		AND METHOD	
US	8207742	DIRECTIONAL ZONE SELECT	12/31/2008
		INTERLOCK METHOD	
US	8170816	PARALLEL ARC DETECTION USING	12/29/2008
<i>9</i> ×	42,444	DISCRETE WAVELET TRANSFORMS	2.0.25/2000
US	8420963	ELECTRICAL ENCLOSURE	12/23/2009
55	012000	APPARATUS	ر ٥٠٠ ما و ماسد بسا د

Country	Pat. / Appl. No.	Title	Appl. Date
US	7692108	CIRCUIT BREAKER LOCK-OUT	12/16/2008
		DEVICE	
US	8178806	DEVICE FOR MOUNTING AN	4/17/2009
		ACCESSORY DEVICE TO A CIRCUIT	
		BREAKER	
US	8027154	REPLACEMENT PANEL BOARD AND	12/31/2008
		METHODS FOR SELECTING	
US	8618435	ABLATIVE PLASMA GUN	5/26/2009
US	8589094	GLOBAL TRIP UNIT	8/28/2009
US	8280670	METHOD AND APPARATUS FOR	10/20/2009
		DETECTING FAILURE OF AN	
		ACTUATOR SWITCHING DEVICE	
US	8183479	LOCK MOUNTING DEVICE	5/1/2009
US	8344994	REDUCED ENERGY LET THROUGH	9/11/2009
		MODE INDICATION AND DELAY IN	
		SWITCHING DEVICES	
US	7944213	GROUND FAULT DETECTION DEVICE	9/24/2009
US	8922972	INTEGRAL MODULE POWER	8/12/2011
		CONDITIONING SYSTEM	
US	7994882	SPACE ALLOCATION WITHIN A	4/18/2009
		CIRCUIT BREAKER	
US	8089282	TEST ASSEMBLY FOR A CIRCUIT	4/18/2009
		BREAKER	
US	8093746	CONTROL OF FOUR-LEG	12/16/2009
		TRANSFORMERLESS	
		UNINTERRUPTIBLE POWER SUPPLY	
US	8282174	CORNER STRUCTURE FOR	4/17/2009
		ELECTRICAL ENCLOSURE	
US	8380454	ELECTRICAL EQUIPMENT	8/14/2009
		ASSEMBLY AND METHOD OF	
		CALIBRATING AN ELECTRICAL	
		EQUIPMENT ASSEMBLY	
US	8335063	REDUNDANT SYSTEMS, METHODS,	8/31/2010
		AND APPARATUS FOR USE IN ARC	
		FLASH PREVENTION SYSTEMS	
US	9359798B2	DOOR LATCH FOR ELECTRICAL	12/23/2009
		EQUIPMENT ENCLOSURE	
US	8324302	INSULATING COMPOSITION AND	2/18/2010
		METHOD FOR MAKING THE SAME	
US	8492979	PLASMA GENERATION APPARATUS	3/25/2010
US	8922958	METHOD AND SYSTEMS FOR	6/12/2012
		DISCHARGING ENERGY FROM AN	
		ELECTRICAL FAULT	

Country	Pat. / Appl. No.	Title	Appl. Date
US	8330069	APPARATUS AND SYSTEM FOR ARC	9/16/2010
		ELIMINATION AND METHOD OF	
		ASSEMBLY APPARATUS AND	
		SYSTEM FOR ARC ELMINATION AND	
		METHOD OF ASSEMBLY	
US	8564915	METHODS, SYSTEMS, AND	9/8/2010
		APPARATUS FOR DETECTING ARC	
		FLASH EVENTS USING LIGHT AND	
		TIME DISCRIMINATION	
US	8649139	METHODS, SYSTEMS, AND	8/23/2010
		APPARATUS FOR DETECTING ARC	
		FLASH EVENTS USING CURRENT	
		AND VOLTAGE	
US	8666520	METHODS, SYSTEMS, AND	10/12/2010
		APPARATUS FOR SHEDDING LOADS	
		FROM AN ELECTRICAL GRID	
US	8270167	HEAT TRANSFER APPARATUS FOR	10/21/2010
		USE WITH ELECTRICAL DEVICES	
US	8526151	SHARED MEMORY ARCHITECTURE	11/12/2010
		FOR PROTECTION OF ELECTRICAL	
		DISTRIBUTION EQUIPMENT	
US	8189311	CIRCUIT BREAKER CONTROL	11/30/2009
US	8471159	UNDERCARRIAGE AND KEYLOCK	11/15/2010
		ASSEMBLY FOR USE WITH A	
		CIRCUIT BREAKER	
US	8422256	CONTROL SYSTEM FOR HIGH-	7/30/2010
		EFFICIENCY OPERATION IN	
	4 4 9 9	PARALLEL INVERTER	
		INSTALLATIONS	
US	8830026	SHAPE MEMORY ALLOY ACTUATED	12/30/2010
		CIRCUIT BREAKER	
US	8536815	METHODS AND SYSTEMS	1/28/2011
		INVOLVING ELECTRIC MACHINE	
		CONTROLLERS	
US	8785776	METHODS AND SYSTEMS FOR	12/6/2010
		COUPLING BUSWAY COMPONENTS	
US	9251980B2	APPARATUS FOR INTERRUPTING	1/14/2011
		CURRENT	
US	8681469	CIRCUIT PROTECTION DEVICE FOR	3/22/2011
		USE IN MEDIUM AND HIGH	
		VOLTAGE ENVIRONMENTS	
US	8400321	METHODS AND APPARATUS FOR	11/15/2010
00	Q (QQUZZ)	OPERATING AN ELECTRONIC TRIP	22,10,2010
		DEVICE	

Country	Pat. / Appl. No.	Title	Appl. Date
US	8395063	LOCKING DEVICE FOR USE WITH A	12/29/2010
		CIRCUIT BREAKER AND METHOD OF	
X T.C.	6470701	ASSEMBLY	2/2/2010
US	8479601	GEARLESS TRANSMISSION	8/3/2010
Y10	9297027	MECHANISM PROTECTION ON OTER AND AND OTER AND AND OTER OF THE PROPERTY OF THE	711 (10010
US	8385035	PROTECTION SYSTEM HAVING	7/16/2010
		REDUCED ENERGY LET-THROUGH	
TYN	0.2775.2.54	MODE AND ZONE SELECTIVITY	10/0/2010
US	8472154	SYSTEMS, METHODS, AND	12/8/2010
		APPARATUS FOR LEAKAGE	
		CURRENT MASKING AND GROUND	
7.70	0.155550	FAULT DETECTION	7/20/2010
US	8455752	INTEGRAL AC MODULE GROUNDING	7/29/2010
***	2270122	SYSTEM	0.12.012.01
US	8270139	ADJUSTABLE ARC ELECTRODE	9/16/2010
		ASSEMBLY AND METHOD OF	
		ASSEMBLING	
US	8497439	SELF-ALIGNING SECONDARY	3/10/2011
		DISCONNECT DEVICE FOR	
		ELECTRICAL SWITCHGEAR	
US	8525054	DISCHARGE MECHANISM FOR	12/17/2010
		CIRCUIT BREAKER	
US	8264809	SYSTEM AND APPARATUS FOR	9/15/2010
		CIRCUIT PROTECTION WITHIN AN) 1 1 1 1
		EQUIPMENT ENCLOSURE	
US	8405364	APPARATUS FOR CONTROLLING	9/2/2010
		CAPACITOR CHARGE STATUS AND	
		METHOD OF ASSEMBLY	
US	8575916	METHOD, SYSTEM, AND APPARATUS	12/8/2010
		FOR DETECTING AN ARC EVENT	
		USING BREAKER STATUS	
US	8482905	MOUNTING MODULES FOR A DC	7/13/2011
		DISTRIBUTION ASSEMBLY	
US	8487721	CIRCUIT INTERRUPTION DEVICE	1/6/2011
		AND METHOD OF ASSEMBLY	
US	9373978B2	UNINTERRUPTIBLE POWER SUPPLY	7/24/2012
		APPARATUS FOR RECEIVING POWER	
		FROM DIFFERENT ELECTRICAL	
		UTILITY CONFIGURATIONS	
US	8593133	CURRENT MEASURING SYSTEMS	12/29/2010
		AND METHODS OF ASSEMBLING THE	
		SAME	

Country	Pat. / Appl. No.	Title	Appl. Date
US	8536838	CAPACITANCE CHECK AND	12/14/2010
		VOLTAGE MONITORING CIRCUIT	
		FOR USE WITH A CIRCUIT	
		PROTECTION DEVICE	
US	8552333	SYSTEMS, METHODS, AND	12/30/2010
		APPARATUS FOR PREVENTING	
		ELECTROMIGRATION BETWEEN	
		PLASMA GUN ELECTRODES	
US	9036309	ELECTRODE AND PLASMA GUN	9/16/2010
		CONFIGURATION FOR USE WITH A	
		CIRCUIT PROTECTION DEVICE	
US	8649146	CAPACITANCE CHECK AND	12/17/2010
		CURRENT MONITORING CIRCUIT	
		FOR USE WITH A CIRCUIT	
		PROTECTION DEVICE	
US	8547106	METHODS AND SYSTEMS	12/30/2010
		INVOLVING MONITORING CIRCUIT	
		CONNECTIVITY	
US	8704114	INTERLOCKED CIRCUIT BREAKERS	5/5/2011
US	9054553	REDUNDANT CONTROL SYSTEMS.	1/16/2012
~ ~		METHODS, AND DEVICES FOR	
		PARALLEL INVERTER	
		INSTALLATIONS	
US	9425650B2	SYSTEMS, METHODS, AND DEVICES	1/31/2012
	3 12303022	FOR CONTROL OF MULTIMODE UPS	1,00,000
US	9048037	LINEAR AUTOMATIC TRANSFER	2/17/2012
	3010031	SWITCH AND SWITCHING MEANS	
US	8963555	METHODS, SYSTEMS, AND	5/13/2011
0.5	0205555	APPARATUS FOR DETECTING LIGHT	0/13/2011
		AND ACOUSTIC WAVES	
US	8598484	SYSTEM AND APPARATUS FOR	12/30/2010
O.O	0520101	CIRCUIT PROTECTION WITHIN AN	12,50,2010
		EQUIPMENT ENCLOSURE	
US	8350175	DEVICE AND METHOD FOR CIRCUIT	12/30/2010
. Cip	0.33017.5	PROTECTION	12/3///2010
US	8900002	ADJUSTABLE ELECTRICAL BUSWAY	12/28/2011
OB	0200002	JOINT	12/20/2011
US	9588182	SYSTEMS, METHODS, AND DEVICES	1/10/2013
UB	7300102	FOR CAPACITANCE ESTIMATION OF	1/10/2013
		POWER CAPACITORS	
TTC	8796568	SWITCHING ASSEMBLY HAVING AN	12/29/2010
US	0130309		12/25/2010
		INTERLOCK DEVICE FOR A	
ric	92/64/60	SELECTOR SWITCH	1/01/0011
US	8366460	WITHDRAWABLE CIRCUIT BREAKER	1/31/2011
		SHUTTER SYSTEMS	<u> </u>

Country	Pat. / Appl. No.	Title	Appl. Date
US	8299377	INTERLOCKS FOR WITHDRAWABLE BREAKERS	1/31/2011
US	8773235	ELECTRICAL SWITCH AND CIRCUIT BREAKER	11/15/2012
US	8788233	DIAGNOSTIC SYSTEM AND METHOD FOR A THERMISTOR AMPLIFIER CIRCUIT	1/18/2011
US	8278811	DEVICE AND METHOD FOR CIRCUIT PROTECTION	12/30/2010
US	9160202	CONTROL SYSTEM FOR UNINTERRUPTIBLE POWER SUPPLIES	1/31/2012
US	9184572	OVERLAP PROTECTIVE SHUTTER DEVICE FOR ELECTRICAL EQUIPMENT	4/25/2014
US	8847088	COVER MOUNTED HANDLE OPERATING MECHANISM WITH INTEGRATED INTERLOCK ASSEMBLY FOR A BUSPLUG ENCLOSURE	9/22/2011
US	8540526	ADJUSTABLE ELECTRICAL BUSWAY JOINT	12/28/2011
US	8472219	METHOD AND SYSTEMS FOR CONVERTING POWER	9/14/2011
US	8570713	ELECTRICAL DISTRIBUTION SYSTEM INCLUDING MICRO ELECTRO-MECHANICAL SWITCH (MEMS) DEVICES	6/29/2011
US	8381614	HANDLE APPARATUS	11/16/2011
US	8854070	CHARGING DEVICE, DETECTION SYSTEM, AND METHOD OF TESTING A DETECTION SYSTEM	1/26/2012
US	8690612	ELECTRICAL CONNECTORS AND METHODS FOR COUPLING THE ELECTRICAL CONNECTORS TO BUSBARS	3/26/2012
US	8595900	ELECTRICAL SYSTEM ENCLOSURE	3/30/2012
US	8550830	METHODS AND SYSTEMS FOR COUPLING BUSWAY FITTINGS	6/1/2012
US	9236768B2	SYSTEMS, METHODS, AND DEVICES FOR CONTROL OF PARALLEL UNINTERRUPTIBLE POWER SUPPLIES	1/31/2012
US	8830657	SWITCHBOARD AND METHOD OF MANUFACTURING SAME	2/1/2012

Country	Pat. / Appl. No.	Title	Appl. Date
US	9214874	INTELLIGENT LEVEL TRANSITION SYSTEMS AND METHODS FOR TRANSFORMERLESS UNINTERRUPTIBLE POWER SUPPLY	7/31/2012
US	8981954	METHODS, SYSTEMS, AND APPARATUS FOR PROTECTION SYSTEM ACTIVATION AND DYNAMIC LABELING	5/8/2012
US	9413178B2	CHARGING DEVICE AND METHOD OF DETECTING A CONNECTION TO GROUND	11/11/2011
US	8988175	OVERRIDE DEVICE FOR A CIRCUIT BREAKER AND METHODS OF OPERATING CIRCUIT BREAKER	1/26/2012
US	8717744	FUSE COVER	10/25/2011
US	9354257B2	SYSTEMS AND METHODS FOR USE IN MEASURING CURRENT THROUGH A CONDUCTOR	11/4/2011
US	8576546	FUSE ISOLATION SWITCH	9/6/2011
US	8681482B2	APPARATUS FOR ENCLOSING A SWITCHING ASSEMBLY IN AN AUTOMATIC TRANSFER SWITCH	1/19/2012
US	8792226	HEAT TRANSFER SYSTEM FOR USE WITH ELECTRICAL DEVICES AND METHOD OF OPERATING THE SAME	3/27/2012
US	8912461	ARC CHUTE ASSEMBLY AND METHOD OF MANUFACTURING SAME	1/23/2012
US	8791362	SHUTTER DOOR ASSEMBLY FOR AN ELECTRICAL PANEL	5/24/2012
US	9111670	CERAMIC, GRADED RESISTIVITY MONOLITH USING THE CERAMIC, AND METHOD OF MAKING	11/26/2012
US	9053888	TIE BAR FOR MOLDED CASE CIRCUIT BREAKER AND METHOD OF ASSEMBLY	7/10/2012
US	8542084	CIRCUIT PROTECTION DEVICE AND TRIP UNIT FOR USE WITH A CIRCUIT PROTECTION DEVICE	3/13/2012
US	8963662	ARC CHUTELESS DC CURRENT INTERRUPTOR	3/1/2013
US	9401251B2	MOLDED CASE CIRCUIT BREAKER	5/16/2012
US	9444233B2	METHODS, SYSTEMS, AND APPARATUS FOR AUTOMATED MAINTENANCE MODE SWITCHING	8/29/2012

Country	Pat. / Appl. No.	Title	Appl. Date
US	9030793	METHOD, DEVICE, AND SYSTEM FOR	4/13/2012
		MONITORING CURRENT PROVIDED	
		TO A LOAD	
US	9146278	SYSTEMS AND METHODS FOR	6/7/2013
		MONITORING CIRCUIT BREAKER	
		OPERATION	
US	13/963642	METHODS AND SYSTEMS FOR	8/9/2013
		MONITORING DEVICES IN A POWER	
		DISTRIBUTION SYSTEM	
US	8737030	POWER DISTRIBUTION SYSTEMS	9/14/2012
		AND METHODS OF OPERATING A	
		POWER DISTRIBUTION SYSTEM	
US	8724274	POWER DISTRIBUTION SYSTEMS	9/14/2012
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	AND METHODS OF OPERATING A	27 - 17 - 23 - 24 -
		POWER DISTRIBUTION SYSTEM	
US	9349560B2	LIMITER TYPE AIR CIRCUIT	2/20/2014
O.D	95.1950022	BREAKER WITH BLOW OPEN	2.20,201,
		ARRANGEMENT	
US	8662940	ELECTRICAL CONNECTORS AND	12/28/2011
UU	8002740	METHODS FOR COUPLING THE	12/20/2011
		ELECTRICAL CONNECTORS TO	
		BUSBARS	
ÚS	9468083B2	PLASMA GENERATION DEVICE	10/30/2012
US	2400003D2	ASSEMBLY ARC MITIGATION	10/30/2012
		DEVICE AND METHOD OF	
		ASSEMBLING A PLASMA	
		GENERATION DEVICE ASSEMBLY	
rio	9091049		12/7/2012
US	8981248	ARC MITIGATION ASSEMBLY AND	12/1/2012
		METHOD OF ASSEMBLY TO AVOID	
T. T.PN	0000016	GROUND STRIKE	10/0/0010
US	8993916	VARIABLE VENTING AND DAMPING	12/7/2012
		ARC MITIGATION ASSEMBLIES AND	
ارسر تداشد	245222472	METHODS OF ASSEMBLY	2000 0000
US	9468084B2	PLASMA GENERATION DEVICE	10/30/2012
		ASSEMBLY ARC MITIGATION	
		DEVICE AND METHOD OF	
		ASSEMBLING A PLASMA	
		GENERATION DEVICE ASSEMBLY	
US	8471654	CIRCUIT PROTECTION DEVICE AND	10/25/2012
		FLUX SHIFTER FOR A CIRCUIT	
		PROTECTION DEVICE	
US	8717741	BUSBAR CONNECTION SYSTEM,	4/19/2012
		SWITCHGEAR UNIT, AND METHOD	
		OF TRANSPORTING SWITCHGEAR	
		COMPONENTS	

Country	Pat. / Appl. No.	Title	Appl. Date
US	8921701	MODULAR INSULATOR FOR BUSBAR SUPPORT AND METHOD OF ASSEMBLING	9/4/2012
US	9413142B2	Panelboard stationary plenum	12/12/2012
US	9153948	SYSTEM AND METHOD FOR ACTUATION OF POWER PANEL	2/11/2013
US	9105415	RETAINING INSERT FOR AN ELECTRICAL PROTECTION SYSTEM AND METHOD	4/22/2013
US	9214797	APPARATUS, SYSTEMS, AND METHODS FOR OPERATION OF A TRIP UNIT IN A CIRCUIT PROTECTION DEVICE	2/13/2013
US	9368955B2	SYSTEM AND METHOD TO DERIVE POWER AND TRIP A CIRCUIT BREAKER FROM AN EXTERNAL DEVICE	2/14/2013
US	8810987	METHOD AND APPARATUS FOR POWER MANAGEMENT IN ETU WITHIN A CIRCUIT BREAKER WHEN USED AS A HOST CONTROLLER	10/19/2012
US	9404947B2	SYSTEMS AND METHODS FOR DETECTING POWER QUALITY OF UNINTERRUPIBLE POWER SUPPLIES	8/31/2012
US	9054513	CIRCUIT PROTECTION DEVICE AND METHODS OF CONFIGURING A CIRCUIT PROTECTION DEVICE	10/17/2012
US	14/713725	CIRCUIT PROTECTION DEVICE AND METHODS OF CONFIGURING A CIRCUIT PROTECTION DEVICE	5/15/2015
US	9299522B2	SHUTTER LOCKING MECHANISM FOR CIRCUIT BREAKER ASSEMBLY	9/28/2012
US	9304168B2	METHODS AND APPARATUS FOR TESTING AN ELECTRONIC TRIP DEVICE	10/29/2012
US	9831675	SYSTEM FOR COMMON REDUNDANT BYPASS FEED PATHS IN UNINTERRUPITBLE POWER SUPPLIES	12/27/2012
US	5877611	SIMPLE AND EFFICIENT SWITCHING REGULATOR FOR FAST TRANSIENT LOADS SUCH AS MICROPROCESSORS	10/8/1997
US	RE37738	SIMPLE AND EFFICIENT SWITCHING REGULATOR FOR FAST TRANSIENT LOADS SUCH AS MICROPROCESSORS	6/28/2000

Country	·	Title	Appl. Date
US	5917312	SYSTEM AND METHOD FOR	6/16/1998
		VOLTAGE POSITIONING A	
		REGULATOR AND REGULATOR	
		EMPLOYING THE SAME	
US	5940287	CONTROLLER FOR A SYNCHRONOUS	7/14/1998
		RECTIFIER AND POWER CONVERTER	
		EMPLOYING THE SAME	
US	6134122	INTEGRATED VOLTAGE AND	1/15/1999
		CURRENT MODE CONTROLLER FOR	
		A POWER CONVERTER AND	
		METHOD OF OPERATION THEREOF	
US	7432688	SOFT-TRANSITION CONTROLLER OF	2/17/2006
		A SYNCHRONOUS CONVERTER	
US	8789856	APPARATUS AND METHOD FOR	12/4/2006
		HOLDING A COVER IN A CLOSED	
	-	ORIENTATION	
US	6060867	SWITCH DRIVER FOR A SNUBBER	8/28/1998
		CIRCUIT, METHOD OF OPERATION	
		THEREOF AND POWER CONVERTER	
		EMPLOYING THE SAME	
US	6351396	METHOD AND APPARATUS FOR	3/4/2000
		DYNAMICALLY ALTERING	
		OPERATION OF A CONVERTER	
		DEVICE TO IMPROVE CONVERSION	
		EFFICIENCY	
US	6396725	SYSTEM AND METHOD FOR	7/31/2000
		IMPROVING CONTROL LOOP	
		RESPONSE OF A POWER SUPPLY	
US	8564976	INTERLEAVED LLC POWER	11/19/2008
		CONVERTERS AND METHOD OF	
		MANUFACTURE THEREOF	
US	8686592	SYSTEM AND METHOD FOR	7/7/2010
		COMBINING THE OUTPUTS OF	
		MULTIPLE, DISPARATE TYPES OF	1
		POWER SOURCES	
US	8427815	PLATFORM FOR A POWER	5/7/2010
		DISTRIBUTION SYSTEM	
US	8797718	CABINET FOR A POWER	3/8/2012
		DISTRIBUTION SYSTEM	2,0,20,2
US	8797011	VARIABLE CURRENT LIMITER, A	12/13/2010
rwc.		POWER SUPPLY AND A POINT OF	20,20,10
	1	LOAD CONVERTER EMPLOYING THE	
		LIMITER AND A METHOD OF	
		OPERATING A NON-ISOLATED	•
		VOLTAGE CONVERTER	

Country	Pat. / Appl. No.	Title	Appl. Date
US	8737024	SELF-ADJUSTABLE OVERCURRENT	2/25/2011
		PROTECTION THRESHOLD CIRCUIT,	
		A METHOD FOR GENERATING A	
		COMPENSATED THRESHOLD SIGNAL	
		AND A POWER SUPPLY EMPLOYING	
		THE CIRCUIT OR METHOD	
US	8829865	POWER FACTOR CORRECTION	7/5/2011
		EFFICIENCY IMPROVEMENT	
		CIRCUIT, A CONVERTER EMPLOYING	
		THE CIRCUIT AND A METHOD OF	
		MANUFACTURING A CONVERTER	
US	9093859	DC POWER SYSTEM HAVING A	7/28/2011
		POWER ARCHITECTURE FOR	
		OPTIMIZING EFFICIENCY AND A	b b b
		SYSTEM CONTROLLER OF THE	
		SYSTEM	
US	8547711	LLC CONVERTER ACTIVE SNUBBER	11/19/2010
		CIRCUIT AND METHOD OF	
		OPERATION THEREOF	
US	9083242	INTERLEAVED LLC CONVERTER	8/26/2011
~ 5	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	EMPLOYING ACTIVE BALANCING	0,20.2011
US	6104584	VOLTAGE FEEDBACK INRUSH	2/18/1999
OD	070307	CURRENT LIMIT CIRCUIT HAVING	213011999
		INCREASED TOLERANCE FOR	
		COMPONENT VALUE VARIATION	
US	6218891	INTEGRATED CIRCUIT INCLUDING A	7/28/2000
UD	0210071	DRIVER FOR A METAL-	14,20/2000
		SEMICONDUCTOR FIELD-EFFECT	
		TRANSISTOR	
US	6191564	POWER FACTOR CORRECTING	11/24/1999
Ud	0171304	ELECTRICAL CONVERTER	1.1/.24/1.222
		APPARATUS	
US	6169671	SNUBBER CIRCUIT FOR A POWER	4/21/2000
OB	0109071	SWITCH AND RECITIFYING DIODE	4/21/2000
		AND POWER CONVERTER	
		EMPLOYING THE SAME	
US	6124701	SYSTEM AND METHOD FOR	6/22/1999
US	0124/01	DETERMINING BATTERY CONDITION	0/22/1999
		AND TELECOMMUNICATIONS	
		EQUIPMENT INCORPORATING THE	
TIC	C118C9A	SAME METHODS AND ARRABATUS FOR	E/20/1000
US	6118680	METHODS AND APPARATUS FOR	5/28/1999
		LOAD SHARING BETWEEN	
		PARALLEL INVERTERS IN AN AC	
		POWER SUPPLY	

Country	Pat. / Appl. No.	Title	Appl. Date
US	6693811	INTEGRATED CONTROLLER,	7/2/2002
		METHOD OF OPERATION THEREOF	
		AND POWER SUPPLY EMPLOYING	
		THE SAME	
US	7095638	CONTROLLER FOR	9/3/2003
	•	COMPLEMENTARY SWITCHES OF A	
		POWER CONVERTER AND METHOD	
		OF OPERATION THEREOF	
US	14/350697	VACUUM CIRCUIT BREAKER	4/9/2014
		ASSEMBLY	
US	9697992	SYSTEM AND APPARATUS FOR ARC	2/19/2014
		ELIMINATION	
US	9431782B2	CURRENT CARRYING SYSTEMS AND	2/25/2014
		METHODS OF ASSEMBLING THE	
		SAME	
US	15/235222	Thermally effective profile busbar passive	8/12/2016
		cooling system	
US	9871331	MODULAR SWITCHGEAR	7/27/2015
		CONNECTION AND METHOD OF	
		ELECTRICALLY CONNECTING A	
		MODULAR COMPARTMENT	
US	9184013	CONDUCTOR GUIDE MEMBER FOR A	6/21/2013
		CIRCUIT BREAKER TERMINAL	
		ASSEMBLY	
US	9576750	CONDUCTOR GUIDE MEMBER FOR A	6/25/2015
		CIRCUIT BREAKER TERMINAL	
		ASSEMBLY	
US	9391432B2	POWER TRANSMISSION ASSEMBLY	8/7/2013
US	9184014	ELECTRICAL OPERATOR FOR	2/1/2013
		CIRCUIT BREAKER AND METHOD	
		THEREOF	
US	9129760	SHUTTER SYSTEM FOR A	1/7/2013
		SWITCHGEAR COMPARTMENT AND	
		METHOD OF MANIPULATING A	
		SHUTTER SYSTEM	
US	9595404	ELECTRICAL SWITCHING	1/19/2016
		APPARATUS INCLUDING AN	
		ADJUSTABLE DAMPER ASSEMBLY	
US	9368295B2	ELECTRICAL TRANSFER SWITCH	2/27/2014
		SYSTEM	and an investor & st
US	9347513B2	HYDRAULIC DAMPER FOR	6/12/2014
0,0	75,15352	ELECTRICAL SWITCHING	21 2 mil m 22 3 "T
		APPARATUS AND METHOD	

Country	Pat. / Appl. No.	Title	Appl. Date
US	9488714B2	METHODS AND SYSTEMS FOR CONTINUOUS CALIBRATION OF CIRCUIT BREAKER TRIP UNITS AND METERING DEVICES	3/15/2013
US	9325167B2	METHOD, SYSTEM, AND APPARATUS FOR PROVIDING ARC FLASH MITIGATION	6/19/2014
US	9638733	COMPUTING DEVICE AND METHODS OF DETECTING THERMAL HOTSPOTS IN A POWER DISTRIBUTION SYSTEM	12/13/2013
US	9171665	INTEGRATED INDUCTOR ASSEMBLIES AND METHODS OF ASSEMBLING SAME	3/4/2014
US	9093825	Panelboard insulated moveable barrier	12/12/2012
US	9472925B2	SWITCHGEAR HOUSING INCLUDING A PRESSURE RELIEF MEMBER	4/23/2014
US	9479848B2	SYSTEM AND METHOD FOR MONITORING CHARACTERISTICS OF AN ELECTRICAL DEVICE	11/8/2013
US	9231486B2	SYSTEM AND METHOD FOR INFORMATION COMMUNICATION BETWEEN ELECTRICALLY ISOLATED CIRCUITS	3/5/2013
US	9373964B2	OPTIMIZED CONTROL OF A POWER CONVERTER IN RESPONSE TO LOAD CONDITIONS	3/5/2013
US	9608513	METHODS AND SYSTEMS FOR IMPROVING LOAD TRANSIENT RESPONSE IN LLC CONVERTERS	3/5/2014
US	9520790B2	INTERLEAVED LLC CONVERTERS AND CURRENT SHARING METHOD THEREOF	3/12/2014
US	9548670	METHODS AND SYSTEMS FOR CALIBRATING A RESONANT CONVERTER	2/25/2014
US	9178359	POWER CONVERTER OPERABLE FROM VARIOUS POWER SOURCES	3/6/2013
US	14/206560	INTEGRATED MAGNETIC ASSEMBLIES AND METHODS OF ASSEMBLING SAME	3/12/2014
US	9053845	TRANSFORMER WITH PLANAR PRIMARY WINDING	3/15/2013
US	9438027B2	SYSTEMS AND METHODS FOR POWER INTERRUPTION	3/15/2013

Country		Title	Appl. Date
US	9350175B2	AN INPUT RELAY ARCHITECTURE	3/5/2013
		FOR RECTIFYING POWER	
		CONVERTERS AND SUITABLE FOR	
		AC OR DC SOURCE POWER	
US	9685768	SPOUT FOR SWITCHGEAR,	6/3/2014
		SWITCHGEAR HAVING SPOUT, AND	
		METHOD THEREOF	
US	15/485484	SPOUT FOR SWITCHGEAR,	4/12/2017
		SWITCHGEAR HAVING SPOUT, AND	
		METHOD THEREOF	
US	9208962	CIRCUIT BREAKER INCLUDING AN	11/26/2013
	242 43 44	ANTIREBOUND SYSTEM	1172012013
		ANTIREBOUND SYSTEM FOR A	
		CIRCUIT BREAKER AND METHOD	
US	9722421	DC Plant Controller And Method For	5/1/2012
CD	3722421	Selecting Among Multiple Sources	5(1)2012
US	9722422	DC PLANT FOR SELECTING AMONG	5/1/2012
C)3.	9122722	MULTIPLE SOURCES	3/1/2012
US	8384483	HIGH EFFICIENCY POWER	4/30/2012
U.B	0204402		4/30/2012
FIC	9/47150	AMPLIFIER POWER ARCHITECTURE	0/28/0011
US	8647159	APPARATUS AND METHOD FOR	2/28/2011
		EFFECTING ELECTRICAL	
		TERMINATION WITH A PLURALITY	
		OF TYPES OF TERMINATION	·
	000.01.01	STRUCTURES	
US	8836164	POLYPHASE POWER MANAGEMENT	12/7/2011
		SYSTEM FOR	
		TELECOMMUNICATIONS	
		EQUIPMENT SITE POWER PLANT	
		AND METHOD OF OPERATION	
		THEREOF	
US	8816649	HYBRID ARCHITECTURE FOR DC	4/13/2011
		POWER PLANTS WITH A	
		CONTROLLER FOR PROVIDING	
		REDUNDANT RECHARGE	
****		CAPABILITIES	
US	9007793	SYNCHRONOUS RECTIFIER DRIVER	5/1/2012
		CIRCUIT RECTIFIER	
US	13/363573	LITHIUM BATTERY PROTECTIVE	2/1/2012
		ENCLOSURE	
US	8929106	MONOTONIC PRE-BIAS START-UP OF	5/17/2012
		A DC-DC CONVERTER	
US	9291683B2	POWER MODULE PROTECTION AT	10/11/2012
	sas a cocasta.	STARTUP	10/11/2012

Country	Pat. / Appl. No.	Title	Appl. Date
US	8743566	SYSTEM AND METHOD FOR	1/26/2012
		INCREASING DC POWER SYSTEM	
		EFFICIENCY WITHOUT REQUIRING A	
		LARGE BATTERY RESERVE	
US	8792254	MULTILEVEL POWER CONVERTER	6/28/2011
		AND METHODS OF	
		MANUFACTURING AND OPERATION	
		THEREOF	
US	8681513	OPTIMIZATION OF A POWER	6/28/2011
		CONVERTER EMPLOYING AN LLC	
		CONVERTER	
US	9397462B2	RAIL MOUNTING SYSTEM AND	3/15/2013
		DETACHING METHOD	
US	8913406	PARALLED POWER CONVERTERS	6/8/2012
,	्रिट काच रहें हैं	WIHT AUTO STAGGER START UP	
US	9106129	SELF-DRIVEN SYNCHRONOUS	2/24/2012
		RECTIFIER DRIVE DIRCUIT, METHOD	
		OF OPERATION THEREOF AND	
		POWER CONVERTER	
		INCORPORATING THE SAME	
US	8917524	MULTI-FUNCTION INDUCTOR AND	2/6/2012
	0347321	MANUFACTURE THEREOF	
US	9426901B2	PATTERNING METHOD AND	10/12/2012
	7 (20) 0 13/2	APPARATUS FOR COMPONENT	2.07 2.21 2.02.2
		BOARDS	
US	15/231392	STENCIL SET AND SYSTEM FOR	8/8/2016
Ų,D	15/251574	PRINTING SOLDER PASTE FOR	0.3.2010
		PRINTED CIRCUIT BOARDS	
US	9320151B2	PROTECTIVE SLEEVE FOR	10/17/2012
U.G	7320131132	ELECTRICAL COMPONENTS	10/1//2012
US	9236804B2	Regulated Converter With Self Adjusting	12/25/2012
OD.	JANGOU TAM	Output Set Point Control	2 m 200; mV 3.25
US	9281753B2	LLC Converter With Dynamic Gain	7/31/2012
CD:	9201 (JUSS)	Transformation for Wide Input and Output	(1.2 \$1.20.12)
		Range	
US	8971074	A Bias Supply A Power Supply And A	1/4/2012
US	09/10/4	Method Of Using Bias Supply Voltage	1/4/2012
		Levels To Signal Informtion Across An	
		Isolation Boundary	
TTC	D702107	FACEPLATE V2 FOR USE WITH AN	3/15/2013
US	D702197		3/13/2013
110	D702650	ELECTRICAL COMPONENT	2/15/2012
US	D702650	FACEPLATE V3 FOR USE WITH AN	3/15/2013
7.77	Propert	ELECTRICAL COMPONENT	2/1/2/2013
US	D702651	FACEPLATE V4 FOR USE WITH AN	3/15/2013
		ELECTRICAL COMPONENT	

Country	Pat. / Appl. No.	Title	Appl. Date
US	D702652	FACEPLATE FOR USE WITH AN	3/15/2013
		ELECTRICAL COMPONENT	
US	9398715B2	ELECTRONIC MODULE SHELF	3/15/2013
		ASSEMBLY AND METHODS	
US	9398701B2	COMPONENT HOLDING	10/23/2013
		STRUCTURES SYSTEM AND METHOD	
US	9882424	REDUNDANT UNINTERRUPTIBLE	2/21/2014
		POWER	
US	9491895B2	A POWER DISTRIBUTION RACK BUS	12/10/2013
		BAR ASSEMBLY AND METHOD OF	
		ASSEMBLING THE SAME	
US	14/195594	POWER CONVERTER AND METHODS	3/3/2014
		FOR INCREASING POWER DELIVERY	
		OF SOFT ALTERNATING CURRENT	
		POWER SOURCE	
US	9548871	SYSTEMS AND METHODS FOR	3/4/2014
		MASTER ARBITRATION	
US	8970339	INTEGRATED MAGNETIC	3/15/2013
***	0,5,0,5,5,7	ASSEMBLIES AND METHODS OF	3723,4013
		ASSEMBLING SAME	
US	9171667	MAGNETIC DEVICE HAVING	3/18/2014
0.0	7171001	INTEGRATED CURRENT SENSING	3710/2011
		ELEMENT AND METHODS OF	
		ASSEMBLING SAME	
US	9035736	MAGNETIC DEVICE HAVING	6/16/2014
Q D	3033730	INTEGRATED CURRENT SENSING	0,10,201,
		ELEMENT AND METHODS OF	
		ASSEMBLING SAME	
US	9490634B2	POWER DISTRIBUTION SYSTEM	11/25/2014
Ų.b	747009492	USING MULTIPLE POWER MODULES,	11/25/2017
		AND METHOD	
US	9640315	LOW STRAYLOSS TRANSFORMERS	5/13/2013
OU	7040313	AND METHODS OF ASSEMBLING THE	3/13/2013
		SAME	
US	15/583653	Ultra low stray losses transformer	5/1/2017
US	9362075B2	COVER ASSEMBLY FOR CIRCUIT	12/3/2013
US	2,302073132	BREAKER CIRCUIT BREAKER	12/3/2013
		HAVING THE SAME AND METHOD	
US	9479011B2	METHOD AND SYSTEM FOR A DUAL	12/5/2013
O O	2772011132	CONVERSION UNINTERRUPTIBLE	121312013
		POWER SUPPLY	
US	0695960	BUCK-BOOST CONVERTER AND	11/7/2014
40	9685860	METHOD FOR REGULATION	1.1/1/2014
TTC	0505070		10/15/2014
US	9595878	DRIVE CIRCUIT FOR SYNCHRONOUS	10/15/2014
	<u> </u>	RECTIFIER AND METHOD THEREOF	<u></u>

Country	Pat. / Appl. No.	Title	Appl. Date
US	9406470B2	TRISTABLE FLEXURE MECHANISM	2/18/2014
US	9412549B2	ELECTROMAGNETICALLY	2/18/2014
		ENHANCED CONTACT SEPARATION	
		IN A CIRCUIT BREAKER	
US	9692223	POWER DISTRIBUTION SYSTEMS	10/31/2013
		AND METHODS OF TESTING A	
		POWER DISTRIBUTION SYSTEM	
US	14/301516	SYSTEMS AND METHODS FOR	6/11/2014
		MULTI-USE MULTI-MODE UPS	-
US	14/301518	Control system for multi-mode UPS	6/11/2014
US	14/571739	MONOLITHIC CONTACT SYSTEM	12/16/2014
		AND METHOD OF FORMING	
US	14/799401	SYSTEM AND METHOD FOR	7/14/2015
		CONTROLLING DYNAMIC OUTPUT	
		IMPEDANCE OF AN INVERTER	
US	9455564B2	CURRENT AND VOLTAGE MODULE	2/21/2014
		AND METHODS OF MONITORING	
		CURRENT AND VOLTAGE IN POWER	
		DISTRIBUTION SYSTEMS	
US	9685820	REDUNDANT UNINTERRUPTIBLE	6/17/2014
		POWER SUPPLY SYSTEMS	·
US	9355798B2	SYSTEM AND METHOD FOR	8/21/2014
		QUENCHING AN ARC	
US	9728955	ZONE SELECTIVE INTERLOCKING	12/11/2013
		ZSI POWER DISTRIBUTION SYSTEMS	
		AND METHODS OF OPERATING A ZSI	
		POWER DISTRIBUTION SYSTEM	
US	9595799	ELECTRICAL ENCLOSURE HAVING A	3/13/2014
		DUAL BUS BAR AND A COMPONENT	
		WITH A DUAL BUS BAR CONNECTOR	
US	9577412	SWITCHGEAR HOUSING INCLUDING	6/24/2014
		A FLOATING EXHAUST FLAP	
		ASSEMBLY	
US	9583920	INTERLOCK SYSTEM FOR A	3/17/2015
		SHUTTER SEPARATING A BUS BAR	
		PORTION FROM AN ELECTRICAL	
		COMPONENT	
US	9444234B2	SWITCHGEAR INCLUDING A	5/28/2014
		WITHDRAWABLE SWITCHGEAR	
		UNIT HAVING A BLOCKING	
		MECHANISM	
US	9325158B2	ELECTRICAL ENCLOSURE	3/13/2014
•		INCLUDING AN INTEGRATED DEAD	
		FRONT AND DOOR	

Country	Pat. / Appl. No.	Title	Appl. Date
US	9622374	ELECTRICAL EQUIPMENT AND A METHOD OF MANUFACTURING	7/31/2015
US	9831717	SYSTEMS AND METHODS FOR OPERATING UNINTERRUPTIBLE POWER SUPPLIES	9/16/2015
US	9723742	INTEGRATED POWER RACKS AND METHODS OF ASSEMBLING THE SAME	4/14/2014
US	9696349	A CURRENT SENSING SYSTEM	6/26/2014
US	9705360	REDUNDANT UNINTERRUPTIBLE POWER SUPPLY SYSTEMS	6/17/2014
US	14/447189	SYSTEMS AND METHODS FOR SINGLE ACTIVE BRIDGE CONVERTERS	7/30/2014
US	9746305	UNEVEN SURFACE DEFLECTION AND AMPLITUDE MEASUREMENT TOOL	10/8/2014
US	9748763	CIRCUIT PROTECTION DEVICES AND METHODS OF MONITORING PROTECTION DEVICES IN A POWER DISTRIBUTION SYSTEM	11/4/2014
US	14/327171	UNINTERRUPTIBLE POWER SUPPLY AND METHOD OF OPERATION	7/9/2014
US	9307615B2	FIELD SELECTABLE CONTACTOR CONTROL MODULES	7/17/2014
US	9870890	LOAD CENTER WITH PLUG-IN NEUTRAL	1/27/2015
US	14/972486	CONTACT ARMS FOR USE IN ELECTRICAL SWITCHGEAR AND METHODS OF FABRICATING SAME	12/17/2015
US	9488689B2	SYSTEMS AND METHODS FOR IDENTIFYING FAULT LOCATION USING DISTRIBUTED COMMUNICATION	8/28/2014
US	9837812	POWER DISTRIBUTION SYSTEMS AND METHODS OF OPERATING POWER DISTRIBUTION SYSTEMS WITH PARTIAL DIFFERENTIAL PROTECTION	11/20/2014
US	9564751	ZONE SELECTIVE INTERLOCKING AND CIRCUIT PROTECTION DEVICE MONITORING IN A POWER DISTRIBUTION SYSTEM	11/14/2014
US	9324528B1	MAGNETIC TRIP MECHANISM FOR CIRCUIT BREAKER	11/17/2014

Country	Pat. / Appl. No.	Title	Appl. Date
US	9735616	SYSTEMS AND METHODS FOR	3/6/2015
		PROVIDING INCREASED FAULT	
		CURRENT CAPABILITY IN	
		UNINTERRUPTIBLE POWER SUPPLY	
		SYSTEMS	
US	9729055	SYSTEMS AND METHODS OF	3/10/2015
		INCREASING POWER CONVERTER	
		EFFICIENCY	
US	9374001B1	METHODS AND SYSTEMS FOR	2/3/2015
		IMPROVING LOAD TRANSIENT	
		RESPONSE IN POWER CONVERSION	
		SYSTEMS	
US.	9786457	SYSTEMS AND METHODS FOR	1/14/2015
		FREEWHEEL CONTACTOR CIRCUITS	
US	9852851	MOLDED CASE CIRCUIT BREAKER	10/21/2014
		WITH CURRENT SENSING UNIT	† † † † † † † † † † † † † † † † † † †
US	9374926B1	SYSTEMS AND METHODS FOR	1/16/2015
	1	POWER CONVERSION AND	
		DISTRIBUTION	1
US	14/964640	SWITCH CABINETS FOR USE IN	12/10/2015
		ELECTRICAL SWITCHGEAR AND	
		METHODS OF ASSEMBLING THE	
		SAME	
US	9461446B1	ELECTRICAL ENCLOSURE HAVING A	3/30/2015
		BREAKER COVER GASKET AND	
		METHOD	
US	9857812	SYSTEMS AND METHODS FOR	12/1/2014
		ADVANCED DIAGNOSTIC IN	
		MODULAR POWER CONVERTERS	
US	14/888943	CIRCUIT BREAKER HAVING A	11/4/2015
		FLOATING MOVEABLE CONTACT	
US	9746502	SYSTEMS AND METHODS OF	2/5/2015
		MONITORING A POWER SYSTEM	4 4 6 6 8
		POWER CONVERTER	4 4 6 6
US	9844136	PRINTED CIRCUIT BOARDS HAVING	12/1/2014
		PROFILED CONDUCTIVE LAYER AND	
		METHODS OF MANUFACTURING	
• .		SAME	
US	14/568817	SYSTEMS AND METHODS FOR	12/12/2014
		EXPLOITING CURRENT CAPABILITY	† † † † †
		IN STATIC UPS	
US	14/568632	SYSTEMS AND METHODS FOR	12/12/2014
		HYBRID VOLTAGE AND CURRENT	
		CONTROL IN STATIC UPS SYSTEMS	

Country	Pat. / Appl. No.	Title	Appl. Date
US	9735615	SYSTEMS AND METHODS FOR	1/8/2015
		MANAGING POWER BACKFEED IN	
		UNINTERRUPTIBLE POWER SUPPLY	
		SYSTEMS	
US	9704684	CIRCUIT BREAKER CROSSBAR	9/18/2015
		ASSEMBLY	
US	14/626154	EXHAUST SYSTEM FOR	2/19/2015
		SWITCHGEAR ENCLOSURE, AND	
		SWITCHGEAR ENCLOSURE HAVING	
k de sadanande de desante de la consej de de sa dició sej de desinte de la		THE SAME	
US	9768593	INTRA-COMPARTMENT COOLING	2/23/2016
		CHANNEL COMPONENT FOR A	
		METAL-CLAD SWITCHGEAR	
		ASSEMBLY	
US	9865405	FIXED CONTACT FOR JOINING A BUS	2/3/2015
		BAR AND A SLIDING CONTACT OF	
		AN ELECTRICAL SWITCHGEAR	
US	D803790	CIRCUIT BREAKER	3/6/2015
US	29/621654	CIRCUIT BREAKER	10/10/2017
US	9859752	UNINTERRUPTIBLE POWER SUPPLY	6/5/2015
		AND METHOD OF USE	
US	14/884275	DIRECT CURRENT POWER	10/15/2015
		DISTRIBUTION AND CONVERSION	
		SYSTEM	
US	9870878	INFORMATION DISPLAY SYSTEM	3/1/2016
		FOR SWITCHING DEVICE,	
		SWITCHING DEVICE, AND METHOD	
US	9786447	MOUNTING ASSEMBLY FOR A	1/8/2015
		CIRCUIT BREAKER MECHANISM	
US	14/640390	INFORMATION DISPLAY SYSTEM	3/6/2015
		FOR SWITCHING DEVICE,	
		SWITCHING DEVICE, AND METHOD	
US	9859716	HYBRID AC AND DC DISTRIBUTION	5/29/2015
b) 4/9/4/		SYSTEM AND METHOD OF USE	
US	15/042198	CIRCUIT BREAKER CROSSBAR	2/12/2016
		ASSEMBLY AND METHOD	
US	9653896	ELECTRICAL ENCLOSURE	3/30/2015
		INCLUDING AN INTEGRAL EXHAUST	
7.70	000000	DUCT AND METHOD	6(5)0035
US	9660439	DIRECT CURRENT POWER	6/5/2015
		DISTRIBUTION AND PROTECTION	
* 10	1 i lom dan da	SYSTEM	
US	14/970769	HIGH-SPEED COMMUNICATIONS	12/16/2015
		COUPLING FOR USE IN A CIRCUIT	
		BREAKER ASSEMBLY	

Country	Pat. / Appl. No.	Title	Appl. Date
US	14/673059	ELECTRICAL ENCLOSURE	3/30/2015
		INCLUDING A SELECTIVLY	
		CLOSEABLE VENTILATION OPENING	
		AND METHOD	
US	9787091	SYSTEMS AND METHODS FOR	9/16/2015
		CONTROLLING A POWER	
		CONVERSION SYSTEM	
US	15041971	CIRCUIT BREAKER ASSEMBLY	2/11/2016
		INCLUDING A CIRCUIT BREAKER	
		CONNECTOR	
US	15/044353	FILTER ASSEMBLY FOR A CIRCUIT	2/16/2016
0.0	10,011000	BREAKER ARC CHAMBER	20.20.20
US	9742164	SECONDARY DISCONNECT	6/16/2015
	3, 1210	ASSEMBLY, SWITCHING DEVICE	0.10,20.15
		SYSTEM HAVING SECONDARY	
		DISCONNECT ASSEMBLY, AND	
		METHOD	
US	9692224	POWER DISTRIBUTION SYSTEMS	6/15/2015
0.0	7072224	AND METHODS OF MONITORING	0/13/2013
		ZONE SELECTIVE INTERLOCKING IN	
		A POWER DISTRIBUTION SYSTEM	
US	9576753	MOVEABLE CONTACT ARM	6/16/2015
US	93/0733	RELEASES LATCH PLATE	0/10/2013
		ENGAGEMENT IN A CIRCUIT	
T 777	0.50050	BREAKER PETADUNG ASSEMBLY FOR A	6/33/0015
US	9552950	RETAINING ASSEMBLY FOR A	6/11/2015
		CIRCUIT BREAKER CONTACT	
7 703	11/940050	SYSTEM	0/2/2017
US	14/842958	OVER-CURRENT PROTECTION	9/2/2015
	1.1.000.2001	ASSEMBLY	F 10 0 10 0 1 0
US	14/788471	CIRCUIT BREAKER HAVING	6/30/2015
		BREAKER INFORMATION MODULE	
		AND METHOD OF USE	
US	14/823154	SYSTEMS AND METHODS FOR	8/11/2015
		IMPLEMENTING SERIES	
,.,.,.,.,.,.,		COMPENSATORS IN STATIC UPS	
US	9576761	Circuit Breaker Crossbar Assembly	5/20/2015
US	14/986135	GuardEon Power Panel NPI	12/31/2015
US	14/986120	ELECTRICAL DEVICE, ELECTRICAL	12/31/2015
		DISTRIBUTION SYSTEM, AND	
		METHODS OF ASSEMBLING SAME	
US	9842712	SWITCHING DEVICE HAVING	2/26/2016
		TERMINAL COVER, AND METHOD	
US	9842708	CIRCUIT BREAKER INCLUDING	6/3/2016
· · · ·		ROTOR ASSEMBLY	

Country	Pat. / Appl. No.	Title	Appl. Date
US	9843174	RACKING INTERLOCKING SYSTEMS FOR WITHDRAWABLE CIRCUIT BREAKERS	3/9/2016
US	15/054131	SYSTEM AND METHOD FOR REGULATING VOLTAGE IN A LOW VOLTAGE POWER DISTRIBUTION SYSTEM	2/26/2016
US	9882366	ELECTRICAL BUSWAY JOINT WITH SELF-ADJUSTING BRACES	1/7/2016
US	9705299	ELECTRICAL BUSWAY JOINT WITH EXTERNAL VISE BRACES	1/7/2016
US	9705300	ELECTRICAL BUSWAY JOINT WITH LAMINATED BRACING SYSTEM	1/7/2016
US	9590405	ELECTRICAL BUSWAY JOINT WITH LENGTH ADJUSTMENT ASSEMBLY	1/7/2016
US	14/823233	PROTECTION METHODS AND SWITCHES IN UNINTERRUPTIBLE POWER SUPPLY SYSTEMS	8/11/2015
US	15/437945	EMBEDDED POLE AND METHOD OF ASSEMBLING SAME	2/21/2017
US	9590406	ADJUSTABLE ELECTRICAL BUSWAY JOINT WITH FORKED BUSBARS	1/7/2016
US	15/188681	PRINTED CIRCUIT BOARD INCLUDING A THICK-WALL VIA AND METHOD OF MANUFACTURING SAME	6/21/2016
US	15/435263	SWITCHGEAR ENCLOSURE WITH INTERCONNECTED EXHAUST SYSTEM	2/16/2017
US	15/409596	EMBEDDED POLE AND METHODS OF ASSEMBLING SAME	1/19/2017
US	15/075379	LATCH-FREE CIRCUIT BREAKERS	3/21/2016
US	15/082585	CIRCUIT BREAKER INCLUDING END COVERS	3/28/2016
US	15/066133	DFIG-BASED UPS SYSTEMS AND METHODS OF CONTROL	3/10/2016
US	15/132755	DEVICES, SYSTEMS, AND METHODS FOR PROTECTION OF SWITCHGEAR AGAINST ELECTRICAL ARCS	4/19/2016
US	15/075540	LATCH-FREE ACTUATORS	3/21/2016
US	15/092905	SELF-RESETTING BIASING DEVICES FOR CURRENT LIMITING CIRCUIT BREAKER TRIP SYSTEMS	4/7/2016
US	15/263841	ISOLATED PARALLEL UPS SYSTEM WITH CHOKE BYPASS SWITCH	9/13/2016

Country	Pat. / Appl. No.	Title	Appl. Date
US	15/050941	SHUTTER INTERLOCK DEVICES,	2/23/2016
		SYSTEMS, AND METHODS OF USE	
		THEREOF	
UŚ	15/216393	THERMAL COOLING INTERFACE FOR	7/21/2016
		ELECTRICAL JOINTS	
US	15/263821	ISOLATED PARALLEL UPS SYSTEM	9/13/2016
		WITH FAULT LOCATION DETECTION	
US	15/290488	POWER CONNECTOR FOR	10/11/2016
		ELECTRONIC EQUIPMENT	
		SUPPORTED BY A RACK ASSEMBLY	
US	15/332642	CIRCUIT BREAKER INCLUDING	10/24/2016
		ROTARY HANDLE	
US	15/332678	CIRCUIT BREAKER INCLUDING	10/24/2016
		ROTARY HANDLE	
US	15/252792	ELECTRICAL DISTRIBUTION	8/31/2016
	20,20,21,22	APPARATUS AND METHODS OF	0,01,0010
		ASSEMBLING SAME	
US	15/252904	ELECTRICAL DISTRIBUTION	8/31/2016
CB	75,555,61	APPARATUS AND METHODS OF	0.0172010
		ASSEMBLING SAME	
US	15/402428	ELECTRICAL DISTRIBUTION	1/10/2017
O.O.	10/402420	APPARATUS INCLUDING BARRIER	1/10/2011
		AND METHODS OF ASSEMBLING	
		SAME	
US	15/402441	ELECTRICAL DISTRIBUTION	1/10/2017
Q.S	IDITOLATI	APPARATUS INCLUDING BARRIER	1/10/2017
		AND METHODS OF ASSEMBLING	
		SAME	
US	9843124	ELECTRICAL DISTRIBUTION	1/10/2017
Q.B.	9013121	APPARATUS INCLUDING BARRIER	1/10/2017
		AND METHODS OF ASSEMBLING	
		SAME	
US	15/402453	ELECTRICAL DISTRIBUTION	1/10/2017
00	13/402433	APPARATUS INCLUDING BARRIER	1/10/2017
		AND METHODS OF ASSEMBLING	
		SAME	
US	6950725	HOME LATCH-KEY WEB BASED	12/7/2001
US	0930723	AUTOMATION SYSTEM	12/1/2001
US	6242703	BELL ALARM WITH AUTOMATIC	1/14/1998
ua ua	0242700	RESET FOR SMALL FRAME AIR	3/154/1770
		CIRCUIT BREAKER	
T TC1	6007103		2/5/1000
US	6097192	METHOD FOR INITIALIZING SHORT	3/5/1998
		TIME AND GROUNDFAULT	
		PROTECTION HEAT INDEX	
		ACCUMULATORS IN A TRIP UNIT	<u> </u>

Country	Pat. / Appl. No.	Title	Appl. Date
US	6002561	ARCING FAULT DETECTION	1/14/1998
		MODULE	
US	6268989	RESIDENTIAL LOAD CENTER WITH	12/11/1998
		ARCING FAULT PROTECTION	
US	6356426	RESIDENTIAL CIRCUIT BREAKER	7/19/1999
		WITH SELECTABLE CURRENT	
		SETTING, LOAD CONTROL AND	
		POWER LINE CARRIER SIGNALING	
US	5933306	CIRCUIT BREAKER WITH GROUND	1/14/1998
		FAULT DETECTION MODULE	
US	6403902	CIRCUIT BREAKER BELL ALARM	1/14/1998
		ACCESSORY HAVING OPTIONAL	
		RESET AND LOCKOUT FUNCTION	
US	6361205	METHOD OF DETERMINING	2/21/2001
Q.D	03.51203	CONTACT WEAR IN A TRIP UNIT	2.21,27001
US	6466023	METHOD OF DETERMINING	2/7/2001
O.D	0400023	CONTACT WEAR IN A TRIP UNIT	2/7/2001
US	6078489	METHOD FOR PERFORMING	8/20/1998
U.S.	0070407	INSTANTANEOUS PROTECTION IN A	8/20/1998
		TRIP UNIT	
US	6069544	CIRCUIT BREAKER OPERATING	10/22/1998
O.S.	0009344	MECHANISM HAVING A	10/22/1990
		COLLAPSIBLE CONTACT ARM	
T (C.	502/505	LINKAGE ASSEMBLY	5/29/1998
US	5936535	CIRCUIT BREAKER BELL ALARM	3/29/1998
T T.O.	6001044	ACCESSORY	177/2/1 000
US	6091044	SYSTEM FOR MONITORING AND	12/3/1998
		CONTROLLING A	
······································		WELDING/BRAZING OPERATION	2 /2 /4 2 2 2
US	6239962	ARC FAULT CIRCUIT BREAKER	2/9/1999
US	6064018	MOLDED CASE CIRCUIT BREAKER	10/23/1998
		MOLDED POLE ASSEMBLY	
US	6657837	CIRCUIT BREAKER INCORPORATING	12/29/1999
		FAULT LOCKOUT PROTECTION	
US	6992872	CIRCUIT BREAKER INCORPORATING	10/10/2001
		FAULT LOCKOUT PROTECTION	
US	5978209	LOCK-DOWN DEVICE FOR A CIRCUIT	8/14/1998
		BREAKER ASSEMBLY AND	
		ASSEMBLY INCORPORATING SAME	
US	6137070	CIRCUIT BREAKER ASSEMBLY WITH	7/1/1998
		INHIBITOR ASSEMBLY	
US	6180897	CIRCUIT BREAKER ASSEMBLY WITH	5/5/2000
. **		INHIBITOR ASSEMBLY	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
US	6252165	ENCLOSURE AND METHOD OF	5/5/2000
~~		MAKING SAME	

Country	Pat. / Appl. No.	Title	Appl. Date
US	6416702	METHOD OF MOLDING A SADDLE	5/5/2000
		ASSEMBLY FOR CIRCUIT BREAKERS	
US	6036542	SADDLE ASSEMBLY FOR A CIRCUIT	7/1/1998
		BREAKER	
US	6259340	CIRCUIT BREAKER WITH A DUAL	5/10/1999
		TEST BUTTON MECHANISM	
US	6087913	CIRCUIT BREAKER MECHANISM FOR	11/20/1998
		A ROTARY CONTACT SYSTEM	
US	6037555	ROTARY CONTACT CIRCUIT	1/5/1999
		BREAKER VENTING ARRANGEMENT	
		INCLUDING CURRENT	
		TRANSFORMER	
US	6400543	ELECTRONIC TRIP UNIT WITH USER-	7/9/2001
		ADJUSTABLE SENSITIVITY TO	
		CURRENT SPIKES	
US	6234851	STAB CONNECTOR ASSEMBLY	11/9/1999
US	6379196	TERMINAL CONNECTOR FOR A	3/1/2000
		CIRCUIT BREAKER	
US	6015957	HIGH AMPACITY PINLESS	12/31/1998
		CONDUCTING JOINT IN MOVABLE	
		CONTACT ARM ASSEMBLY	
US	6104266	CIRCUIT BREAKER WITH TRIP	6/2/1999
		INDICATION ARRANGEMENT	
US	6448521	BLOCKING APPARATUS FOR	3/1/2000
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CIRCUIT BREAKER CONTACT	
		STRUCTURE	
US	6280216	LUG ADAPTER ASSEMBLY HAVING	11/9/1999
		REDUCED FORCE CLIPS	
US	6323448	CIRCUIT BREAKER STAB CONTACT	12/22/1999
		ASSEMBLY WITH SPRING CLIP	
US	6437261	INTERLOCK FOR USE IN AN	12/7/1998
		ELECTRIC MOTOR HANDLE AND	
		CONTACTOR COMBINATION	
US	6310307	CIRCUIT BREAKER ROTARY	12/17/1999
		CONTACT ARM ARRANGEMENT	
US	6329598	WATER-RESISTANT BUSWAY WITH	8/27/1999
		WATER DRAINAGE DUCT	
US	6255923	ARC FAULT CIRCUIT BREAKER	6/25/1999
US	6232857	ARC FAULT CIRCUIT BREAKER	9/16/1999
US	6175288	SUPPLEMENTAL TRIP UNIT FOR	8/27/1999
0.0	N. 1 () 40 ()	ROTARY CIRCUIT INTERRUPTERS	0.20.112.22.2
US	6229413	SUPPORT OF STATIONARY	10/19/1999
Ju	1 2 2 1 V market	CONDUCTORS FOR A CIRCUIT	10/3/11///
		BREAKER	
	1	DICENTIAL	1

Country	Pat. / Appl. No.	Title	Appl. Date
US	6346869	RATING PLUG FOR CIRCUIT BREAKERS	12/28/1999
US	6215379	SHUNT FOR INDIRECTLY HEATED BIMETALLIC STRIP	12/23/1999
US	6229692	MODULAR CIRCUIT BREAKER AND MODULAR LIGHTING PANELBOARD FOR FIELD ASSEMBLY	6/30/1999
US	6433999	BUS CONNECTION ACCESS PANEL	7/31/2001
US	6087602	MOTOR CONTROL CENTER CIRCUIT BREAKER ASSEMBLY	7/2/1999
US	6222147	CIRCUIT BREAKER ARC EXHAUST BAFFLE WITH VARIABLE APERTURE	3/9/2000
US	6539271	QUALITY MANAGEMENT SYSTEM WITH HUMAN-MACHINE INTERFACE FOR INDUSTRIAL AUTOMATION	12/27/2000
US	6920495	METHOD AND SYSTEM FOR FACILITATING WEB-BASED INFORMATION EXCHANGE VIA A CENTRALIZED WEB STRUCTURE FOR MANAGING PROJECTS AND FUNDING REQUESTS	8/31/2000
US	6301094	DRAWOUT UNIT AND LOAD/LINE TERMINAL ASSEMBLY	3/31/2000
US	6266713	FIELD UPGRADEABLE DYNAMIC DATA EXCHANGER SERVER	9/24/1999
US	6788508	COMPACT LOW AMP ELECTRONIC CIRCUIT BREAKER OR RESIDENTIAL LOAD CENTER	11/6/2001
US	6313981	BUS BAR CONNECTION ASSEMBLY	11/30/1999
US	6211758	CIRCUIT BREAKER ACCESSORY GAP CONTROL MECHANISM	1/11/2000
US	6346868	CIRCUIT INTERRUPTER OPERATING MECHANISM	3/1/2000
US	6700467	CIRCUIT INTERRUPTER OPERATING MECHANISM	9/20/2001
US	6466117	CIRCUIT INTERRUPTER OPERATING MECHANISM	9/20/2001
US	6211757	FAST ACTING HIGH FORCE TRIP ACTUATOR	3/6/2000
US	6473281	AUTOMATIC PROTECTION DEVICE WITH GROUND FAULT ANNUNCIATION	8/17/2000
US.	6459349	CIRCUIT BREAKER COMPRISING A CURRENT TRANSFORMER WITH A PARTIAL AIR GAP	3/6/2000

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Country	Pat. / Appl. No.	Title	Appl. Date
US	6424519	PLUG-IN DRAW OUT UNIT	4/4/2001
US	6457924	SNAP-IN FASTENER	5/31/2000
US	6366188	ACCESSORY AND RECESS	3/15/2000
		IDENTIFICATION SYSTEM FOR	
		CIRCUIT BREAKERS	
US	6556404	SELF POWERED COOLING FAN AND	5/16/2001
		METHOD	
US	6628184	FIELD CONFIGURABLE CONTACTS	11/20/2000
		AND CONTACTOR	
US	6730845	ELECTRIC COMPONENT BOX WITH	5/18/2000
		REMOVABLE COVER	
US	6262644	LATCH RESETTING ARRANGEMENT	3/8/2000
US	6421217	CIRCUIT BREAKER ACCESSORY	3/16/2000
		RESET SYSTEM	
US	6459059	RETURN SPRING FOR A CIRCUIT	3/16/2000
		INTERRUPTER OPERATING	
		MECHANISM	
US	6340925	CIRCUIT BREAKER MECHANISM	7/14/2000
		TRIPPING CAM	
US	6590482	CIRCUIT BREAKER MECHANISM	8/3/2001
		TRIPPING CAM	
US	6479774	HIGH ENERGY CLOSING	10/10/2000
		MECHANISM FOR CIRCUIT	
		BREAKERS	
US	6586693	SELF COMPENSATING LATCH	11/30/2000
		ARRANGEMENT	
US	6535370	APPARATUS AND METHOD FOR	8/30/2000
		REPRESENTING PROTECTION	
		DEVICE TRIP RESPONSE	
US	6721154	APPARATUS AND METHOD FOR	12/13/2002
		REPRESENTING PROTECTION	
****		DEVICE TRIP RESPONSE	
US	6373357	PRESSURE SENSITIVE TRIP	5/16/2000
		MECHANISM FOR A ROTARY	
		BREAKER	
US	6542057	PRESSURE SENSITIVE TRIP	8/20/2001
		MECHANISM FOR A ROTARY	
		BREAKER	
US	6919785	PRESSURE SENSITIVE TRIP	2/28/2003
		MECHANISM FOR A ROTARY	
		BREAKER	
US	6337447	ELECTRICAL DISCONNECT SWITCH	6/5/2000
		ASSEMBLY	
US	6771170	POWER SYSTEM WAVEFORM	4/10/2001
		CAPTURE	

Country	Pat. / Appl. No.	Title	Appl. Date
US	6603075	VERTICAL BUS POWER CONNECTOR	12/20/2000
US	6844799	COMPACT LOW COST CURRENT	4/10/2001
		SENSOR AND CURRENT	
		TRANSFORMER CORE HAVING	
		IMPROVED DYNAMIC RANGE	
US	6909586	CIRCUIT BREAKER VOLTAGE	3/19/2002
		SENSING MODULE	
US	6836396	WORLD WIDE WEB ENABLED AND	9/13/2000
		DIGITAL RATING PLUG	
US	6547348	INTERLOCKING TRIM PLATES	12/22/2000
US	6454424	RV LIGHT LENS	10/11/2000
US	6448522	COMPACT HIGH SPEED MOTOR	1/30/2001
		OPERATOR FOR A CIRCUIT BREAKER	
US	6495781	HANDLE POSITION INDICATOR	12/27/2000
US	6380829	MOTOR OPERATOR INTERLOCK AND	11/21/2000
		METHOD FOR CIRCUIT BREAKERS	
US	6788512	ELECTRONIC TRIP UNIT CAPABLE OF	4/16/2002
		ANALOG AND DIGITAL SETTING OF	! 1 1 1 1 1 1 1
		CIRCUIT BREAKER SETPOINTS	
US	7923650	GANGED AUXILIARY SWITCH	2/22/2001
		CONFIGURATION FOR USE IN A	
		MOLDED CASE CIRCUIT BREAKER	
US	6806800	ASSEMBLY FOR MOUNTING A	10/19/2000
		MOTOR OPERATOR ON A CIRCUIT	
		BREAKER	
US	6476337	AUXILIARY SWITCH ACTUATION	2/26/2001
		ARRANGEMENT	
US	6507256	AUXILIARY MAGNETIC TRIP	8/17/2001
		SYSTEM	
US	6853277	AUXILIARY MAGNETIC TRIP	8/6/2002
		SYSTEM	
US	6437670	MAGNETIC RELEASE SYSTEM FOR A	2/12/2002
<u></u>		CIRCUIT BREAKER	
US	6804101	DIGITAL RATING PLUG FOR	11/6/2001
		ELECTRONIC TRIP UNIT IN CIRCUIT	
		BREAKERS	
US	6980069	MAGNETIC DEVICE FOR A	4/18/2002
* 16	2021111	MAGNETIC TRIP UNIT	1/6/0001
US	6611411	TRIP SIGNAL VERIFYING METHOD	4/6/2001
* 10	212522	AND APPARATUS	8 18 8 18 2 2 2
US	6437262	HANDLE OPERATING ASSEMBLY	2/28/2001
		FOR AN ELECTRIC DISCONNECT	
		SWITCH	<u> </u>

Country	Pat. / Appl. No.	Title	Appl. Date
US	6438800	DOOR HINGE ASSEMBLY FOR AN	1/22/2001
		ELECTRICAL APPLIANCE ENCLOSURE	
US	6423913	LOCKING DEVICE FOR HANDLE	2/28/2001
		OPERATING MECHANISMS	
US	6882258	MECHANICAL BELL ALARM	2/27/2001
		ASSEMBLY FOR A CIRCUIT BREAKER	
US	6880226	METHOD FOR LIMITING MOVEMENT	6/29/2001
	0000220	IN ELECTRICAL CONTACTORS	0.11372001
US	6785581	METHODS AND SYSTEMS FOR	5/6/2002
		FABRICATING COMPONENTS	
US	6546342	ADAPTIVE ALGORITHM TO PREVENT	12/10/2001
		NUISANCE TRIPPING ADAPTIVE	
		ALGORITHM TO PREVENT	
		NUISSANCE TRIPPING	1 1 1 1 1 1
US	6757626	TRIP UNIT AND CIRCUIT BREAKER	3/17/2003
		TO PREVENT NUISSANCE TRIPPING	
US	6794963	MAGNETIC DEVICE FOR A	4/24/2002
		MAGNETIC TRIP UNIT	
US	6791440	APPARATUS FOR ELECTRICALLY	8/2/2002
		ISOLATING CIRCUIT BREAKER	
		ROTOR COMPONENTS	
US	6558025	METHOD AND APPARATUS FOR	7/5/2001
		MOUNTING A LAMP	
US	6868349	METHOD AND DEVICES FOR	4/4/2002
		WIRELESS COMMUNICATION	b b b b b b b b b b b b b b b b b b b
		BETWEEN TEST AND CONTROL	
		DEVICES AND POWER DISTRIBUTION	
		DEVICES	
US	6469882	CURRENT TRANSFORMER INITIAL	10/31/2001
		CONDITION CORRECTION	
US	6545574	ARC FAULT CIRCUIT BREAKER	12/17/2001
US	6538862	CIRCUIT BREAKER WITH A SINGLE	11/26/2001
		TEST BUTTON MECHANISM	
US	6731483	CIRCUIT BREAKER WITH SINGLE	2/14/2003
		TEST BUTTON MECHANISM	
US	6433444	MODULAR FAULT TOLERANT	2/18/2000
		POWER DISTRIBUTION SYSTEM	
US	6784770	EARTH LEAKAGE DETECTION	12/6/2000
		DEVICE	
US	6426688	MODULAR CONTACT SYSTEM FOR	5/25/1999
		DIFFERENT FRAME SIZES	
US	6225881	THERMAL MAGNETIC CIRCUIT	4/28/1999
		BREAKER	

Country	Pat. / Appl. No.	Title	Appl. Date
US	6326869	CLAPPER ARMATURE SYSTEM FOR A	9/23/1999
		CIRCUIT BREAKER	
US	6366438	CIRCUIT INTERRUPTER ROTARY	3/6/2000
		CONTACT ARM	
US	6207916	ELECTRIC ARC EXPLOSION	12/23/1999
		CHAMBER SYSTEM	
US	6414255	SWITCH	4/14/2000
US	6683764	ARC EXTINGUISHING AID	2/8/2001
US	6191374	SELF-ADJUSTING CONTACT LEVER	9/22/1998
US	6559743	STORED ENERGY SYSTEM FOR	3/12/2001
		BREAKER OPERATING MECHANISM	
US	6448519	CONTACT SYSTEM ARRANGEMENT	11/29/2000
		FOR PLUG-IN CIRCUIT BREAKERS	
		AND BASE	
US	6423917	SELF-DISENGAGING CIRCUIT	3/13/2001
		BREAKER MOTOR OPERATOR	
US	6373010	ADJUSTABLE ENERGY STORAGE	6/15/2000
		MECHANISM FOR A CIRCUIT	
		BREAKER MOTOR OPERATOR	
US	6816353	ELECTRONIC ACTUATION FOR	6/6/2001
		MECHANICALLY HELD	
		CONTACTORS	
US	6759939	FUSE HOLDER ASSEMBLY	4/26/2002
US	6417661	SELF POWERED CURRENT SENSOR	4/6/1999
US	6291900	ELECTRICAL ENERGY	1/13/2000
		MANAGEMENT FOR MANUALLY	
		POWERED DEVICES	
US	6442569	APPARATUS AND METHOD FOR	4/26/1999
		DATA TRANSFER BETWEEN	
		DATABASES	
US	6111489	CIRCUIT BREAKER CONFIGURATION	1/29/1999
US	6184672	CURRENT SENSOR ASSEMBLY WITH	8/13/1998
		ELECTROSTATIC SHIELD	
US	6963195	APPARATUS FOR SENSING CURRENT	11/20/2000
US	6430210	RECEIVER FOR DETECTING AN	4/5/1999
		AMPLITUDE MODULATED SIGNAL	1 1 2 2
		INSINUATED ON AN GHM SIGNAL	
US	6346875	GHM AGGREGATOR	1/3/2000
US	6424250	COMMUNICATION SYSTEM	3/8/1999
		UTILIZING MODIFIED GEOMETRIC	
		HARMONIC MODULATION	
US	6442006	GROUND FAULT CIRCUIT BREAKER	12/7/1999
US	6472882	FAIL-SAFE ELECTRONIC CIRCUIT	10/23/2000
		BREAKER	

Country	Pat. / Appl. No.	Title	Appl. Date
US	6856647	METHODS AND SYSTEMS FOR	10/17/2000
		NEUTRAL-TO-GROUND	
		COMMUNICATION	
US	6483065	METHODS AND APPARATUS FOR	10/9/2001
		CURRENT TRANSMISSION THROUGH	
		A CIRCUIT BREAKER	
US	6507128	LOW-ENERGY STORAGE FAST-	5/23/2001
		START UNINTERRUPTIBLE POWER	
		SUPPLY SYSTEM AND METHOD	
US	7129593	LOW-ENERGY STORAGE FAST-	11/6/2002
		START UNINTERRUPTIBLE POWER	
		SUPPLY METHOD	
US	6909994	METHOD, SYSTEM AND COMPUTER	11/25/2002
		PRODUCT FOR PERFORMING	
		FAILURE MODE AND EFFECTS	
		ANALYSIS THROUGHOUT THE	
		PRODUCT LIFE CYCLE	
US	7401063	PROCESS FOR SEMI-AUTOMATIC	12/16/2002
		MAINTENANCE OF A KNOWLEDGE	
		BASE USING TAGGED EXAMPLES	
WO	PCT/US2017/016874	RACKING INTERLOCKING SYSTEMS	2/8/2017
,, ,		FOR WITHDRAWABLE CIRCUIT	
		BREAKERS	
WO	PCT/US2017/021721	DFIG-BASED UPS SYSTEMS AND	3/10/2017
		METHODS OF CONTROL	
US	7359772	METHOD, SYSTEM, AND STORAGE	11/6/2003
		MEDIUM FOR COMMUNICATING	
		WITH VEHICLE CONTROL	
US	14/261195	METHOD AND SYSTEM FOR	4/24/2014
		TRANSIENT VOLTAGE SUPPRESSION	
		DEVICES WITH ACTIVE CONTROL	
US	14/505975	STRUCTURE AND METHOD FOR	10/3/2014
		TRANSIENT VOLTAGE SUPPRESSION	23.23.2
		DEVICES WITH A TWO-REGION BASE	
US	62/476346	SYSTEMS AND METHODS FOR LINE	3/24/2017
ÇB	(Jan) 17 (Jan)	VOLTAGE DROP COMPENSATION	5,2 (,201,
US	15/729759	SYSTEMS AND METHODS FOR LINE	10/11/2017
به پ	was small and	VOLTAGE DROP COMPENSATION	2013/2/2021
US	15/439336	Wireless peer to peer network for electrical	2/22/2017
20	30 40 1 1 40 50 50 50 50 50	protection devices	ال کا ایا تند انتخاب ایند
US	15/439350	POWER DISTRIBUTION SYSTEMS	2/22/2017
UU	241707040	AND METHODS OF PERFORMING	المال
		ZONE SELECTIVE INTERLOCKING IN	
		POWER DISTRIBUTION SYSTEMS	
		WITH A COMMUNICATION NETWORK	
	1	WITH A COMMUNICATION NET WORK	I

Country	Pat. / Appl. No.	Title	Appl. Date
US	15/439238	POWER DISTRIBUTION SYSTEMS	2/22/2017
		AND METHODS OF TESTING	
		RESPONSES TO ELECTRICAL	
		CONDITIONS USING A	
		COMMUNICATION NETWORK	
US	15/439460	POWER DISTRIBUTION SYSTEMS	**************************************
		AND METHODS OF PERFORMING	2/22/2017
		ZONE SELECTIVE INTERLOCKING IN	
		POWER DISTRIBUTION SYSTEMS	
		WITH A COMMUNICATION NETWORK	
US	15/439438	POWER DISTRIBUTION SYSTEMS	2/22/2017
		AND METHODS OF PERFORMING	
		GROUND FAULT DETECTION IN	
		POWER DISTRIBUTION SYSTEMS	
		WITH A COMMUNICATION NETWORK	
US	15/702080	METHODS AND SYSTEMS FOR	9/12/2017
		GROUND FAULT DETECTION IN A	
		POWER DISTRIBUTION SYSTEM	
US	15/381514	CONTACT ASSEMBLY FOR	12/16/2016
		ELECTRICAL DEVICES AND METHOD	
		FOR MAKING	
US	15/685262	ELECTRICAL POWER DISTRIBUTION	8/24/2017
		SYSTEM INCLUDING PRESSURE	
		RELEASE MECHANISM	
US	15/985845	VENTILATION COVER APPARATUS	5/22/2018
		FOR AN ELECTRICAL ENCLOSURE	
		INCLUDING WATER-RESISTANT AND	
		ARC-RESISTANT FEATURES	
US	15/985741	CIRCUIT BREAKER INCLUDING	5/22/2018
		ACTIVE ARC CONTROL FEATURES	
US	16/000492	INTEGRATED MAGNETIC	6/5/2018
		ASSEMBLIES AND METHODS OF	.,, .,,
		ASSEMBLING SAME	
US	15/985192	LOCK ASSEMBLIES FOR SWITCH	5/21/2018
		DEVICES OF ELECTRICAL POWER	
		DISTRIBUTION SYSTEMS	
US	15/657786	SINGLE-STAGE DC-DC POWER	7/24/2017
		CONVERTER	,, _,,
US	15/705827	SYSTEM AND METHOD FOR	9/15/2017
	157.700027	STARTING UP A HIGH DENSITY	37.10,2017
		ISOLATED DC-TO-DC POWER	
		CONVERTER	

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RECORDED: 09/13/2018