

## PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT5648741

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
IDEAL POWER INC.	04/11/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	PATHION HOLDINGS, INC.
<b>Street Address:</b>	12980 SARATOGA AVENUE, SUITE D
<b>City:</b>	SARATOGA
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95070
<b>PROPERTY NUMBERS Total: 45</b>	
<b>Property Type</b>	<b>Number</b>
Patent Number:	7599196
Patent Number:	8300426
Patent Number:	8400800
Patent Number:	8395910
Patent Number:	8345452
Patent Number:	7778045
Patent Number:	9130461
Patent Number:	9899932
Patent Number:	8391033
Patent Number:	8441819
Patent Number:	8432711
Patent Number:	8446745
Patent Number:	8451637
Patent Number:	8295069
Patent Number:	8514601
Patent Number:	8406025
Patent Number:	9118247
Patent Number:	8446042
Patent Number:	8446043
Patent Number:	8531858

PATENT

Property Type	Number
Patent Number:	9007796
Patent Number:	8461718
Patent Number:	8471408
Patent Number:	9678519
Patent Number:	9042131
Patent Number:	9614458
Patent Number:	9124095
Patent Number:	9431888
Patent Number:	9219406
Patent Number:	9647568
Patent Number:	9397580
Patent Number:	9796258
Patent Number:	9407133
Patent Number:	9647526
Patent Number:	9077185
Patent Number:	9293946
Patent Number:	9270142
Patent Number:	9520764
Application Number:	15582480
Application Number:	15474944
Application Number:	16232990
Application Number:	62717606
PCT Number:	US2017025163
PCT Number:	US2017067143
PCT Number:	US2018067558

#### **CORRESPONDENCE DATA**

**Fax Number:** (619)696-7124

*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.*

**Phone:** 619-696-6700

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**Correspondent Name:** GORDON & REES LLP

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**Address Line 2:** WALLACE GLAUSI

**Address Line 4:** SAN DIEGO, CALIFORNIA 92101

<b>ATTORNEY DOCKET NUMBER:</b>	PTHN-1191383
<b>NAME OF SUBMITTER:</b>	WALLACE GLAUSI
<b>SIGNATURE:</b>	/WALLACE GLAUSI/

<b>DATE SIGNED:</b>	08/01/2019
<b>Total Attachments: 9</b> source=IP Assignment Agreement PTHN-1191383#page1.tif source=IP Assignment Agreement PTHN-1191383#page2.tif source=IP Assignment Agreement PTHN-1191383#page3.tif source=IP Assignment Agreement PTHN-1191383#page4.tif source=IP Assignment Agreement PTHN-1191383#page5.tif source=IP Assignment Agreement PTHN-1191383#page6.tif source=IP Assignment Agreement PTHN-1191383#page7.tif source=IP Assignment Agreement PTHN-1191383#page8.tif source=IP Assignment Agreement PTHN-1191383#page9.tif	

## INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

This INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT ("IP Assignment"), dated as of April [ ], 2019, is made by Ideal Power Inc., a Delaware corporation (the "Assignor"), in favor of Pathion Holding, Inc., a Delaware corporation ("Assignee").

### RECITALS

A. WHEREAS, under the terms of that certain Asset Purchase Agreement between Assignor, Assignee and Pathion Holdings, Inc., a Delaware corporation, dated April 11, 2019 (the "Asset Purchase Agreement"), Assignor sold, assigned, transferred, conveyed and delivered to Assignee, among other assets, certain intellectual property of Assignor.

B. WHEREAS, under the terms of the Asset Purchase Agreement, Assignor has agreed to execute and delivery this IP Assignment, for recording with national, federal and state governmental authorities including, but not limited to, the US Patent and Trademark Office and the US Copyright Office, as applicable.

NOW THEREFORE, the parties to this IP Assignment, intending to be legally bound, agree as follows:

1. In consideration for the execution of the Asset Purchase Agreement, the payment of the consideration stipulated in the Asset Purchase Agreement, and other good and valuable consideration, the receipt and sufficiency are hereby acknowledged, Assignor hereby sells, assigns, transfers, conveys and delivers to Assignee, and Assignee hereby accepts, all of Assignor's right, title and interest in, to and under the following (the "Assigned IP"):

(a) the Assignor's patents, patent applications and patent rights in any jurisdiction in the world, identified on Schedule 1 hereto, and any counterparts, reissues, divisions, reexaminations, continuations and continuations-in-part of, and any other patents claiming priority from, any of the foregoing (collectively, the "Patents");

(b) the trademark registrations and applications set forth in Schedule 2 hereto, together with all associated goodwill connected with the use of and symbolized thereby and all issuances, extensions and renewals thereof (the "Trademarks");

(c) the copyright registrations, applications for registration and exclusive copyright licenses, if any, set forth in Schedule 3 hereto and all issuances, extensions and renewals thereof (the "Copyrights");

(d) all rights of any kind whatsoever of Assignor accruing under any of the foregoing provided by applicable law of any jurisdiction, by international treaties and conventions and otherwise throughout the world;

(e) any and all royalties, fees, income, payments and other proceeds now or hereafter due or payable with respect to any and all of the foregoing; and

(f) any and all claims and causes of action, with respect to any of the foregoing, whether accruing before, on and/or after the date hereof, including all rights to and claims for damages, restitution and injunctive and other legal and equitable relief for past, present and future infringement, dilution, misappropriation, violation, misuse, breach or default,

with the right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.

2. Assignor authorizes the Commissioner for Patents, the Commissioner for Trademarks and the Register of Copyrights and any other national, federal and state governmental officials to record and register this IP Assignment upon request by Assignee. Assignor shall take such steps and actions following the date hereof, including the execution of any documents, files, registrations, or other similar items, to ensure that the Assigned IP is properly assigned to Assignee, or any assignee or successor thereto.

3. This IP Assignment is executed and delivered in accordance with and subject to the Asset Purchase Agreement (including, without limitation, the representations, warranties, covenants, agreements and indemnities contained therein), which is incorporated herein by reference. In the event of any inconsistencies or ambiguities between this IP Assignment and the Asset Purchase Agreement, the terms of the Asset Purchase Agreement shall govern. Notwithstanding anything to the contrary in this IP Assignment, nothing herein is intended to, nor shall it, extend, amplify, or otherwise alter the representations, warranties, covenants and obligations of the parties contained in the Asset Purchase Agreement or the survival thereof.

4. This IP Assignment shall bind the parties hereto and inure to the benefit of the parties and their respective successors and assigns.

5. This IP Assignment and any claim, controversy, dispute or cause of action (whether in contract, tort or otherwise) based upon, arising out of or relating to this IP Assignment and the transactions contemplated hereby shall be governed by, and construed in accordance with, the laws of the United States and the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction).

6. This IP Assignment may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this IP Assignment delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this IP Assignment.

*[Signature page follows]*

IN WITNESS WHEREOF, the parties have duly executed and delivered this IP Assignment as of the date first above written.

ASSIGNOR:

IDEAL POWER INC.

By:   
Name: Lon E. Bell  
Title: President and CEO

ASSIGNEE:

PATHION HOLDINGS, INC.

By:   
Name: Michael D. Liddle  
Title: Chief Executive Officer

# SCHEDULE 1

## ASSIGNED PATENTS AND PATENT APPLICATIONS

Internal Reference	Location	Application Number	Filed	Patent Number	Issue Date	Publication Number	Title
Issued US	38						
IPA-012:	US	US 11/759,006	6-Jun-07	US 7599196	5-Oct-09	US 20080013351	Universal Power Converter
IPA-012:A	US	US 12/479,207	5-Jun-09	US 8300426	30-Oct-12	US 20100067272	Converter For Enhanced Efficiency Power Conversion
IPA-012:E	US	US 13/205,243	8-Aug-11	US 8400800	19-Mar-13	US 20120020129	Universal Power Converter with Two Input Drive Operations During Each Half-Cycle
IPA-012:F	US	US 13/205,250	8-Aug-11	US 8395910	12-Mar-13	US 20120033464	Buck-Boost Power Converter Circuits, Methods and Systems
IPA-012:G	US	US 13/205,263	8-Aug-11	US 8345452	1-Jan-13	US 20120008353	Universal Power Converter with Bidirectional Switching Devices
IPA-013:	US	US 11/758,970	6-Jun-07	US 7778045	17-Aug-10	US 20080031019	Universal Power Converter Methods
IPA-013:C	US	US 13/859,265	9-Apr-13	US 9130461	8-Sep-15	US 20140133203	Universal Power Converter Methods with Disconnect After Driving
IPA-013:D	US	US 14/827,730	17-Aug-15	US 9899932	20-Feb-18	US 20160072400	Universal Power Conversion Methods
IPA-020:A	US	US 13/205,212	8-Aug-11	US 8391033	5-Mar-13	US 20110292697	Power Transfer Devices, Methods, and Systems with Crowbar Switch Shunting Energy-Transfer Reactance
IPA-020:B	US	US 13/541,902	5-Jul-12	US 8441819	14-May-13	US 20130069605	Power Transfer Devices, Methods, and Systems with Crowbar Switch Shunting Energy-Transfer Reactance
IPA-020:C	US	US 13/541,905	5-Jul-12	US 8432711	30-Apr-13	US 20130114311	Power Transfer Devices, Methods, and Systems with Crowbar Switch Shunting Energy-Transfer Reactance
IPA-020:D	US	US 13/541,910	5-Jul-12	US 8446745	21-May-13	US 20130114315	Power Transfer Devices, Methods, and Systems with Crowbar Switch Shunting Energy-Transfer Reactance
IPA-020:E	US	US 13/541,914	5-Jul-12	US 8451637	28-May-13	US 20130114316	Power Transfer Devices, Methods, and Systems with Crowbar Switch Shunting Energy-Transfer Reactance
IPA-021:A	US	US 13/205,225	8-Aug-11	US 8295069	23-Oct-12	US 20120014151	Power Conversion with Added Pseudo-Phase
IPA-021:B	US	US 13/542,223	5-Jul-12	US 8514601	20-Aug-13	US 20130063994	Power Conversion with Added Pseudo-Phase
IPA-021:C	US	US 13/542,225	5-Jul-12	US 8406025	26-Mar-13	US 20130063988	Power Conversion with Added Pseudo-Phase

IPA-021:D	US	US 13/872,962	29-Apr-13	US 9118247	25-Aug-15	US 20140029320	Power Conversion with Added Pseudo-Phase
IPA-022:	US	US 13/308,200	30-Nov-11	US 8446042	21-May-13	US 20130038129	PV Array Systems, Methods, and Devices with Improved Diagnostics and Monitoring
IPA-022:A	US	US 13/705,230	5-Dec-12	US 8446043	21-May-13	n/a	PV Array Systems, Methods, and Devices with Improved Diagnostics and Monitoring
IPA-024:	US	US 13/400,567	20-Feb-12	US 8531858	10-Sep-13	US 20120268975	Power Conversion with Current Sensing Coupled through Saturating Element
IPA-024:A	US	US 13/958,135	2-Aug-13	US 9007796	14-Apr-15	US 20140036554	Power Conversion with Current Sensing Coupled through Saturating Element
IPA-028:	US	US 13/308,356	30-Nov-11	US 8461718	11-Jun-13	US 20120274138	Photovoltaic Array Systems, Methods, and Devices with Bidirectional Converter
IPA-028:A	US	US 13/705,240	5-Dec-12	US 8471408	25-Jun-13	US 20130114303	Photovoltaic Array Systems, Methods, and Devices with Bidirectional Converter
IPA-103:	US	US 14/182,243	17-Feb-14	US 9678519	13-Jun-17	nonpub	Voltage Control Mode for Microgrid Applications
IPA-104:	US	US 14/182,236	17-Feb-14	US 9042131	26-May-15	US 20150003115	Power-Packet-Switching Converter with Sequenced Connection to Link Inductor
IPA-111:	US	US 14/182,246	17-Feb-14	US 9614458	4-Apr-17	nonpub	Methods for Determining Maximum Power Point Tracking in Power Converters
IPA-112:	US	US 14/183,403	18-Feb-14	US 9124095	1-Sep-15	nonpub	Islanding Detection in Power Converters
IPA-115:	US	US 14/182,250	17-Feb-14	US 9431888	30-Aug-16	nonpub	Single-Phase To Three Phase Converter AC Motor Drive
IPA-126:	US	US 14/182,256	17-Feb-14	US 9219406	22-Dec-15	nonpub	Systems and Methods for Assessing Current in a Resonant Circuit
IPA-129:	US	US 14/182,268	17-Feb-14	US 9647568	9-May-17	nonpub	Bi-Directional Multi-Port Applications
IPA-132:	US	US 14/183,259	18-Feb-14	US 9397580	19-Jul-16	nonpub	Dual Link Power Converter
IPA-137:	US	US 14/207,039	12-Mar-14	US 9796258	24-Oct-17	nonpub	Bidirectional Power Converters with Electric Vehicle Chargers
IPA-140:	US	US 14/183,415	18-Feb-14	US 9407133	2-Aug-16	nonpub	Active Power Conditioner
IPA-153:	US	US 14/183,274	18-Feb-14	US 9547526	9-May-17	nonpub	Power-packet-switching power converter performing self-testing by admitting some current to the link inductor before full operation



IPA-162:	US	US 14/265,315	29-Apr-14	US 9077185	7-Jul-15	US 20140368038	Systems and Methods for Uninterruptible Power Supplies with Bidirectional Power Converters
IPA-162:A	US	US 14/678,739	3-Apr-15	US 9293946	22-Mar-16	US 20150214784	Systems and Methods for Uninterruptible Power Supplies with Bidirectional Power Converters
IPA-162:B	US	US 14/678,765	3-Apr-15	US 9270142	23-Feb-16	US 20150222147	Systems and Methods for Uninterruptible Power Supplies with Bidirectional Power Converters
IPA-169:	US	US 14/182,277	17-Feb-14	US 9520764	13-Dec-16	nonpub	Bi-Directional Multi-Port Applications
Issued FOREIGN	6						
IPA-011~CN	CN	CN 200780029208.4	6-Feb-09	CN 101523710	5-Mar-14	CN 101523710 A	Universal Power Converter
IPA-011~CN.1	CN	CN 2014011019.1	24-Mar-14	Pending	30-Oct-18	CN 104300771 A	Universal Power Converter
IPA-011~EP	EP	EP 07795915.3	16-Dec-08	EP 2025051	31-Dec-14	EP 2025051	Universal Power Converter
IPA-021~CA	CA	CA 2808490	15-Feb-13	CA 2808490	3-Feb-15	CA 2808490	Power Conversion with Added Pseudo-Phase
IPA-028~SG	SG	SG 201304019-1	21-May-13	SG 190401	28-May-14	SG 190401	Photovoltaic Array Systems, Methods, and Devices with Bidirectional Converter
IPA-104~GB	GB	GB 1515002.2	24-Aug-15	GB 2525135	25-Nov-15	GB 2525135	Power-Packet-Switching Converter with Sequenced Connection to Link Inductor
Pending US	3						
IPA-274:	US	US 15/582,480	28-Apr-17			US 20180109101	Ground Fault Detection Architectures, Systems, Circuits, and Methods
IPA-276:	US	US 15/474,944	30-Mar-17			US 20170288561	Micro-grid Controller
IPA-295	US	US 16/232,990	26-Dec-18			Pending	Net Energy Metering
Pending Foreign	7						
IPA-011~EP.1	EP	EP 14199481.4	23-Dec-14			EP 2874297	Universal Power Converter
IPA-028~IN	IN	IN 4955/DELNP/2013	4-Jun-13			IN 48/2014	Photovoltaic Array Systems, Methods, and Devices with Bidirectional Converter
IPA-276~AU	AU	AU 2017240647	9-Oct-18			AU2017240647 (A1)	Micro-grid Controller

IPA-276~CN	CN	CN 201780021241.6	28-Sep-18			CN 108886327 A	Micro-grid Controller
IPA-276~EP	EP	EP 17776700.1	23-Oct-18			EP 3437182	Micro-grid Controller
IPA-276~IN	IN	IN 201817040176	24-Oct-18			NA (WO 2017/173157)	Micro-grid Controller
IPA-276~JP	JP	2018-551223	28-Sep-18			NA (WO 2017/173157)	Micro-grid Controller
PCT Pending	3						
IPA-276.WO	PCT	PCT/US 17/25163	30-Mar-17			WO 2017/173157	Micro-grid Controller
IPA-284.WO	PCT	PCT/US17/67143	18-Dec-17			WO 2018/112481	ANTI-ISLANDING SYSTEMS AND METHODS USING HARMONICS INJECTED IN A ROTATION OPPOSITE THE NATURAL ROTATION
IPA-295.WO	PCT	PCT/US18/67558	26-Dec-18			Pending	Net Energy Metering
Provisional Pending	1						
IPA-297-P	USpr	US 62/717,606	10-Aug-18			n/a	PPSA Model Inductance Control

**SCHEDULE 2**

**ASSIGNED TRADEMARKS REGISTRATIONS AND TRADEMARK APPLICATIONS**

None.

**SCHEDULE 3**

**ASSIGNED COPYRIGHTS REGISTRATIONS AND APPLICATIONS**

None.