

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5317057

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ZOLO TECHNOLOGIES, INC.	01/02/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	JOHN ZINK COMPANY, LLC
<b>Street Address:</b>	11920 E APACHE ST
<b>City:</b>	TULSA
<b>State/Country:</b>	OKLAHOMA
<b>Postal Code:</b>	74116
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16092992
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(316)828-8494
<i>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.</i>	
<b>Phone:</b>	(316) 828-6416
<b>Email:</b>	kcps_patents@kochind.com
<b>Correspondent Name:</b>	JANE DANIEL
<b>Address Line 1:</b>	4111 E 37TH STREET NORTH
<b>Address Line 4:</b>	WICHITA, KANSAS 67220
<b>ATTORNEY DOCKET NUMBER:</b>	ZOL-2016-PAT-0001-US-PCT
<b>NAME OF SUBMITTER:</b>	JANE D. DANIEL
<b>SIGNATURE:</b>	/JANE D. DANIEL/
<b>DATE SIGNED:</b>	01/09/2019
<b>Total Attachments: 23</b>	
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INTELLECTUAL PROPERTY ASSIGNMENT

This Intellectual Property Assignment (this "IP Assignment") is entered into January 4, 2018, by John Zink Company, LLC, a Delaware limited liability company ("Assignee"), and Zolo Technologies, Inc., a Delaware corporation (the "Assignor"). Capitalized terms used herein but not defined herein shall have the meanings ascribed to such terms in the Purchase Agreement (as hereinafter defined).

WHEREAS, Assignor and Assignee have entered into that certain Asset Purchase Agreement of even date herewith (the "Purchase Agreement"), which provides, among other things, for the sale and assignment by Assignor to Assignee of the Acquired Intellectual Property, and Assignor has agreed to execute and deliver this IP Assignment.

NOW, THEREFORE, in consideration of the mutual promises contained in the Purchase Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by Assignor and Assignee, and subject to the terms and conditions of the Purchase Agreement:

1. Assignment. Assignor does hereby sell, transfer, assign, convey and deliver to Assignee, free and clear of all Liens (other than Permitted Liens), Indebtedness and other Liabilities (other than Assumed Liabilities), all right, title and interest in, to and under the following:

(a) each domain name set forth on Schedule 1 hereto, together with the registrations thereof and all rights associated therewith (the "Domain Names");

(b) the patents and patent applications set forth on Schedule 2 hereto, all issuances, divisions, continuations, continuations-in-part, reissues, extensions, reexaminations and renewals thereof, any patent applications to which any of the foregoing claim priority, the right to claim priority to any of the foregoing, and the inventions described in the foregoing and any improvements thereto (the "Patents");

(c) all common law and statutory rights in each trademark, service mark, trade dress, trade name and other indicator of source set forth on Schedule 3 hereto or otherwise used by Assignor in the Business or in connection with the Acquired Assets, including the goodwill associated therewith, and all applications, registrations, extensions and renewals thereof (the "Marks");

(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; and

(e) all income, royalties, damages and payments due or payable on or after the Closing Date with respect to the Domain Names, Patents and Marks (including damages and payments for past, present or future infringements, misappropriations or other violations thereof) and the right to institute or maintain any Action to protect the same and recover damages for any infringements, misappropriations or other violations thereof, and any corresponding, equivalent or counterpart rights, title or interest that now exist or may be secured hereafter anywhere in the world.

2. Recordation and Further Actions. Seller hereby authorizes the Commissioner for Patents and the Commissioner for Trademarks in the United States Patent and Trademark Office and the officials of corresponding entities or agencies in any applicable jurisdictions to record and register this IP

Assignment upon request by Buyer. Following the date hereof, Seller shall take such steps and actions, and provide such cooperation and assistance to Buyer and its successors, assigns and legal representatives, including the execution and delivery of any affidavits, declarations, oaths, exhibits, assignments, powers of attorney, or other documents, as may be necessary to effect, evidence or perfect the assignment of the Acquired Intellectual Property to Buyer, or any assignee or successor thereto.

3. Purchase Agreement Terms; Other Assignments. Nothing in this IP Assignment, express or implied, is intended to or shall be construed to modify, expand or limit in any way the terms, representations and warranties or covenants contained in the Purchase Agreement, each of which are incorporated by reference into this IP Assignment. To the extent that any provision of this IP Assignment conflicts or is inconsistent with the terms of the Purchase Agreement, the terms of the Purchase Agreement shall govern. It is contemplated that Assignor may, at any time or from time to time, execute, acknowledge and deliver one or more separate instruments of assignment and conveyance relating to certain of the Acquired Assets. In the event that any conflict or ambiguity exists as between this IP Assignment and any such separate instrument of assignment, the terms and provisions of this IP Assignment shall govern and be controlling. Any other Acquired Assets that are specifically assigned or transferred pursuant to any other Ancillary Agreement are being specifically assigned and transferred pursuant to such other Ancillary Agreement and, in each case, shall not be assigned or transferred pursuant to this IP Assignment.

4. Assignability. This IP Assignment shall inure to the benefit of and be binding upon the parties and their respective permitted successors and assigns in accordance with Section 9.1 of the Purchase Agreement.

5. Governing Law. This IP Assignment shall be governed by and construed and enforced in accordance with the Laws of the State of Delaware without regard to principles of conflicts of law.

6. Modification; Waiver. No supplement, modification or amendment of this IP Assignment shall be binding unless executed in writing by Assignee and Assignor. No waiver of any of the provisions of this IP Assignment shall be deemed to be or shall constitute a continuing waiver. No waiver shall be binding unless executed in writing by the party making the waiver

7. Severability. If any provision of this IP Assignment or the application of any provision of this IP Assignment to any party or circumstance is, to any extent, adjudged invalid or unenforceable, the application of the remainder of such provision to such party or circumstance, the application of such provision to other parties or circumstances, and the application of the remainder of this IP Assignment shall not be affected thereby.

8. Counterparts. This IP Assignment may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted by electronic mail shall be deemed originals for purposes of this IP Assignment.

[Signature Pages Follow]

IN WITNESS WHEREOF, Assignee has caused its authorized representative to execute this IP Assignment as of the day and year first above written.

JOHN ZINK COMPANY, LLC  
a Delaware limited liability company

By: [Signature]  
Name: Casey Chambers  
Title: President

ACKNOWLEDGEMENT

State of DK )  
County of Tulsa ) ss.

Subscribed and sworn to before me this 3 day of January, 2018.



Debbie Davis  
Notary Public  
Typed Name: Debbie Davis

My Commission Expires:

2/27/2019

[Assignee Signature Page to IP Assignment]

IN WITNESS WHEREOF, Assignor has caused its authorized representative to execute this IP Assignment as of the day and year first above written.

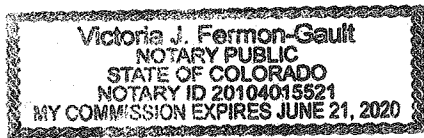
ZOLO TECHNOLOGIES, INC.  
a Delaware corporation

By: [Signature]  
Name: Reed Sarver  
Title: President and Chief Executive Officer

**ACKNOWLEDGEMENT**

State of Colorado )  
County of Boulder ) ss.

Subscribed and sworn to before me this 2 day of January, 2018.



Victoria J. Fermon-Gault  
Notary Public  
Typed Name: Victoria J. Fermon-Gault

My Commission Expires:

June 21, 2020

[Assignor Signature Page to IP Assignment]

**SCHEDULE 1**

**Domain Names**

zolotech.com  
zolotech.net  
zolotech.info  
zolotech.org

## SCHEDULE 2

### Patents

Description	CLIENT	TYPE	CTRY	APP #	PATENT #	STATUS	EXPIRED
Method and Apparatus for Dense Wavelength Multiplexing and Demultiplexing Fiber Optic Signals Using an Echelle Grating Spectrograph	Zolo Technologies, Inc.	Prov - ORG	US	60/152,218		Expired	2000-09-03
Method and Apparatus for Dense Wavelength Division Multiplexing and Demultiplexing Fiber Optic Signals Utilizing a Grating in Combination with a Wedged Etalon Filter	Zolo Technologies, Inc.	Prov - ORG	US	60/158,036		Expired	2000-10-07
Wedged-Etalon Filter as a High Density, Reconfigurable Add/drop Multiplexer for All Fiber-Optic LANs	Zolo Technologies, Inc.	Prov - ORG	US	60/160,698		Expired	2000-10-20
High Resolution Wavelength Locking Technique for One and Two-Dimensional Arrays of Semiconductor Diode Lasers	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US00/42046		Abandoned	2001-07-10
High Resolution Wavelength Locking Technique for One and Two-Dimensional Arrays of Semiconductor Diode Lasers	Zolo Technologies, Inc.	Utility - ORG	TW	89123871		Abandoned	2002-06-27
High Resolution Wavelength Locking Technique for One and Two-Dimensional Arrays of Semiconductor Diode Lasers	Zolo Technologies, Inc.	Utility - ORG	US	09/709,750		Abandoned	2003-05-19
High Resolution Wavelength Locking Technique for One and Two-Dimensional Arrays of Semiconductor Diode Lasers	Zolo Technologies, Inc.	Prov - ORG	US	60/164,464		Expired	2000-11-10
Method and Apparatus for Dense Wavelength Multiplexing and Demultiplexing Fiber Optic Signals Using an Echelle Grating Spectrograph	Zolo Technologies, Inc.	Prov - ORG	US	60/172,843		Expired	2000-12-20
Method and Apparatus for Dense Wavelength Multiplexing and Demultiplexing Fiber Optic Signals from a Single or Many Individual Fibers Using a Single Echelle Grating Spectrograph	Zolo Technologies, Inc.	Prov - ORG	US	60/172,885		Expired	2000-12-20
Antenna and Waveguide Array for Efficiently Coupling De-multiplexed Light from a DWDM Device into an Array of Receiver Fibers	Zolo Technologies, Inc.	Prov - ORG	US	60/180,341		Expired	2001-02-04



Method and Apparatus for Alignment of a Grating-based DWDM System Using a Visible Light Generating Laser Continuous Wave	Zolo Technologies, Inc.	Prov - ORG	US	60/195,719		Expired	2001-04-07
Apparatus and Method for the Reduction of Polarization Sensitivity in Diffraction Gratings Used in Fiber Optic Communications Devices	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US01/11146		Completed	
Apparatus and Method for the Reduction of Polarization Sensitivity in Diffraction Gratings Used in Fiber Optic Communications Devices	Zolo Technologies, Inc.	Utility - NSPCT	AU	2001255236		Abandoned	2021-04-06
Apparatus and Method for the Reduction of Polarization Sensitivity in Diffraction Gratings Used in Fiber Optic Communications Devices	Zolo Technologies, Inc.	Utility - NSPCT	CA	2,406,458		Abandoned	2005-08-16
Apparatus and Method for the Reduction of Polarization Sensitivity in Diffraction Gratings Used in Fiber Optic Communications Devices	Zolo Technologies, Inc.	Utility - NSPCT	CN	01808880.5		Abandoned	2005-08-16
Apparatus and Method for the Reduction of Polarization Sensitivity in Diffraction Gratings Used in Fiber Optic Communications Devices	Zolo Technologies, Inc.	Utility - NSPCT	EP	01928371.2		Abandoned	2005-06-27
Apparatus and Method for the Reduction of Polarization Sensitivity in Diffraction Gratings Used in Fiber Optic Communications Devices	Zolo Technologies, Inc.	Utility - NSPCT	JP	2001-574530		Abandoned	2005-08-16
Apparatus and Method for the Reduction of Polarization Sensitivity in Diffraction Gratings Used in Fiber Optic Communications Devices	Zolo Technologies, Inc.	Utility - NSPCT	SG	200206158-8	92300	Abandoned	2005-08-16
Apparatus and Method for the Reduction of Polarization Dependent Loss in Fiber Optic Devices Employing Diffraction Gratings	Zolo Technologies, Inc.	Prov - ORG	US	60/195,390		Expired	2001-04-07
Apparatus And Method For The Reduction Of Polarization Sensitivity In Diffraction Gratings Used In Fiber Optic Communications Devices	Zolo Technologies, Inc.	Utility - ORG	TW	90108465	156523	Abandoned	2005-08-16
Apparatus and Method for the Reduction of Polarization Sensitivity in Diffraction Gratings Used in Fiber Optic Communications Devices	Zolo Technologies, Inc.	Utility - ORG	US	09/675,768	6400509	Abandoned	2005-08-16

Apparatus and Method for Producing a Flat-Topped Filter Response for Diffraction Grating (De)Multiplexer	Zolo Technologies, Inc.	Utility - ORG	US	09/675,276	6421481	Abandoned	2020-09-29
Apparatus and Method for Producing a Flat-Topped Filter Response for diffraction Grating (De)Multiplexer	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US01/13222		Abandoned	2002-09-06
Production of a Flat-topped Filter Response for a Dense Wavelength Division (De)multiplexer Based on Bulk Diffraction Gratings	Zolo Technologies, Inc.	Prov - ORG	US	60/199,693		Expired	2001-04-26
Production of a Flat-topped Filter Response for a Dense Wavelength Division (De)multiplexer Based on Bulk Diffraction Gratings	Zolo Technologies, Inc.	Prov - ORG	US	60/213,197		Expired	2001-06-21
Echelle Grating Dense Wavelength Division Multiplexer/Demultiplexer	Zolo Technologies, Inc.	Utility - ORG	US	09/628,774	6415080	Issued	2020-07-29
Echelle Grating Dense Wavelength Division Multiplexer/Demultiplexer	Zolo Technologies, Inc.	Utility - CIP	US	10/121,956	6647182	Issued	2020-07-29
Echelle Grating Dense Wavelength Division Multiplexer/Demultiplexer	Zolo Technologies, Inc.	Utility - REIS	US	11/180,027	RE40271	Issued	2020-07-29
Dense Wavelength Division Multiplexer/Demultiplexer Based on Echelle Grating	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US00/23898		Completed	
Dense Wavelength Division Multiplexer/Demultiplexer Based on Echelle Grating	Zolo Technologies, Inc.	Utility - NSPCT	AU	74720/00	781433	Abandoned	2020-08-31
Dense Wavelength Division Multiplexer/Demultiplexer Based on Echelle Grating	Zolo Technologies, Inc.	Utility - NSPCT	CA	2,383,611	2383611	Issued	2020-08-31
Dense Wavelength Division Multiplexer/Demultiplexer Based on Echelle Grating	Zolo Technologies, Inc.	Utility - NSPCT	CN	00813525.8	ZL00813525.8	Issued	2020-08-31
Dense Wavelength Division Multiplexer/Demultiplexer Based on Echelle Grating	Zolo Technologies, Inc.	Utility - NSPCT	EP	00963285.2		Abandoned	2010-01-20
Dense Wavelength Division Multiplexer/Demultiplexer Based on Echelle Grating	Zolo Technologies, Inc.	Utility - NSPCT	JP	2001-522112		Abandoned	2010-01-20
Dense Wavelength Division Multiplexer/Demultiplexer Based on Echelle Grating	Zolo Technologies, Inc.	Utility - NSPCT	SG	200200976-9	87273	Abandoned	2020-08-31

Echelle Grating Dense Wavelength Division Multiplexer/Demultiplexer	Zolo Technologies, Inc.	Utility - ORG	TW	89117919	171448	Abandoned	2020-08-31
Lens-coupled Wavelength Division (De)multiplexing System Utilizing an Echelle Grating	Zolo Technologies, Inc.	Prov - ORG	US	60/209,018		Expired	2001-06-01
Wedged-Etalon Filter as a High-Density, Reconfigurable Add/Drop Multiplexer for Fiber Optic Networks and Method of Dropping a Select Channel of a Multi-Channel Optical Signal	Zolo Technologies, Inc.	Utility - ORG	US	09/650,555		Abandoned	2002-10-18
Reconfigurable Add/Drop Multiplexer for Fiber Optic Networks	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US00/41191		Abandoned	2001-05-27
Reconfigurable Add/Drop Multiplexer for Fiber Optic Networks	Zolo Technologies, Inc.	Utility - ORG	TW	89121850		Abandoned	2003-06-19
Wedged-Etalon Filter as a High-Density, Reconfigurable Add/drop Multiplexer for Fiber Optic Networks	Zolo Technologies, Inc.	Prov - ORG	US	60/221,742		Expired	2001-07-31
Echelle Grating Dense Wavelength Division Multiplexer/Demultiplexer with Two Dimensional Single Channel Array	Zolo Technologies, Inc.	Utility - ORG	US	09/634,619	6304692	Abandoned	2005-02-10
Electro-Optic Solid-State Switch	Zolo Technologies, Inc.	Prov - ORG	US	60/227,888		Expired	2001-08-25
Reconfigurable Add/Drop Multiplexer Preventing Data Loss and Method of Dropping a Select Channel of a Multi-Channel Optical Signal Without Data Loss	Zolo Technologies, Inc.	Utility - ORG	US	09/650,939		Abandoned	2004-06-14
Apparatus and Method Facilitating Optical Alignment of a Bulk Optical Multiplexer/Demultiplexer	Zolo Technologies, Inc.	Utility - ORG	US	09/702,550	6421479	Abandoned	2020-10-31
Apparatus and Method of Packaging of a Bulk Optical (De)Multiplexer	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US01/45276		Abandoned	2003-04-02
Thermally Stable Multiplexer/Demultiplexer	Zolo Technologies, Inc.	Utility - ORG	US	09/702,548		Abandoned	2002-11-25
Vibration Damping Housing for Multiplexer/Demultiplexer	Zolo Technologies, Inc.	Utility - CIP	US	09/747,298		Abandoned	2003-03-05

Banded Add/Drop Demultiplexer	Zolo Technologies, Inc.	Prov - ORG	US	60/258,186		Expired	2001-12-23
Optical Spectrum Analyzer For Use With Dense Wavelength Division Multiplexed Fiber Optic Network	Zolo Technologies, Inc.	Prov - ORG	US	60/272,746		Expired	2002-03-01
Simplified Apparatus And Method Facilitating Optical Adjustment Of A Bulk Optical (De)Multiplexer	Zolo Technologies, Inc.	Prov - ORG	US	60/276,862		Expired	2002-03-16
(De)Multiplexer with Four 'F' Configuration and Hybrid Lens	Zolo Technologies, Inc.	Utility - ORG	US	10/091,128		Abandoned	2003-09-30
(De)Multiplexer with Four 'F' Configuration and Hybrid Lens	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US02/06754		Abandoned	2003-04-29
Echelle Grating (De)Multiplexer with Four 'F' Configuration and Hybrid Lens	Zolo Technologies, Inc.	Prov - ORG	US	60/272,748		Expired	2002-03-01
(De)Multiplexer with Interleaver for Producing a Flat-Top Filter Function and Enhanced Channel Separation	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US02/06755		Abandoned	2003-04-30
(De)Multiplexer with Interleaver for Producing a Flat-Top Filter Function and Enhanced Channel Separation	Zolo Technologies, Inc.	Prov - ORG	US	60/273,217		Expired	2002-03-01
Fiber Pigtail Template Assembly	Zolo Technologies, Inc.	Utility - ORG	US	10/099,878		Abandoned	2003-06-11
Optical Fiber Pigtail Assembly	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US02/07683		Abandoned	2003-06-11
Fiber Pigtail Template Assembly	Zolo Technologies, Inc.	Prov - ORG	US	60/276,769		Expired	2002-03-16
Immersion Grating Dense Wavelength Division Multiplexer/Demultiplexer	Zolo Technologies, Inc.	Prov - ORG	US	60/360,611		Expired	2003-02-27
Reconfigurable Add/Drop DWDM	Zolo Technologies, Inc.	Prov - ORG	US			Closed	
Athermal Bonding of Optical Components	Zolo Technologies, Inc.	Prov - ORG	US			Closed	

Semiconductor Optical Amplifier Array	Zolo Technologies, Inc.	Prov - ORG	US			Closed	
Gratings for Broadening Pass Band	Zolo Technologies, Inc.	Prov - ORG	US	60/331,698		Expired	2002-11-19
Cylindrical Grating for Broadening Pass Band	Zolo Technologies, Inc.	Prov - ORG	US	60/339,841		Expired	2002-11-16
Etched Micro Lens for Producing Flat-Topped Filter Response	Zolo Technologies, Inc.	Prov - ORG	US	60/331,697		Abandoned	2002-11-19
Method for Producing Flat-Topped Filter Response	Zolo Technologies, Inc.	Prov - ORG	US	60/339,847		Expired	2002-11-16
Variable Optical Attenuator Having Retro-reflector Design for Offsetting Input and Output Signals While Maintaining Telecentricity	Zolo Technologies, Inc.	Prov - ORG	US			Closed	
Method And Apparatus For Bonding Optical Components To A Substrate	Zolo Technologies, Inc.	Prov - ORG	US	60/325,511		Expired	2002-09-28
Apparatus And Method For Producing A Flat-Topped Filter Response For (De)Multiplexer Having A Diffraction Grating With Variable Line Spacing	Zolo Technologies, Inc.	Utility - ORG	US	10/209,229	6754412	Abandoned	2007-12-03
Apparatus And Method For Producing A Flat-Topped Filter Response In a Multiplexer/DeMultiplexer	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US03/023893		Abandoned	2005-01-18
Variable Optical Attenuator With Channel Monitor And Integrated Tap Coupler	Zolo Technologies, Inc.	Prov - ORG	US	60/404,054		Expired	2003-08-16
N-Channel Reconfigurable Add/Drop Multiplexer	Zolo Technologies, Inc.	Prov - ORG	US	60/420,770		Expired	2003-10-22
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US04/10048		Completed	
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - NSPCT	AU	2004227359	2004227359	Abandoned	2024-03-31
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - NSPCT	CA	2,520,862		Abandoned	2024-03-31

Optical Mode Noise Averaging Device	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US05/002853		Completed	
Optical Mode Noise Averaging Device	Zolo Technologies, Inc.	Utility - NSPCT	AU	2005236385		Abandoned	2025-02-02
Optical Mode Noise Averaging Device	Zolo Technologies, Inc.	Utility - NSPCT	CA	2,561,711	2561711	Issued	2025-02-02
Optical Mode Noise Averaging Device	Zolo Technologies, Inc.	Utility - NSPCT	CN	200580010448.0	ZL200580010448.0	Issued	2025-02-02
Optical Mode Noise Averaging Device	Zolo Technologies, Inc.	Utility - NSPCT	EP	05712335.8		Abandoned	2025-02-02
Optical Mode Noise Averaging Device	Zolo Technologies, Inc.	Utility - NSPCT	IN	2866/KOLNP/2006	263130	Issued	2025-02-02
Optical Mode Noise Averaging Device	Zolo Technologies, Inc.	Utility - NSPCT	JP	2007-506152		Published	2025-02-02
Optical Mode Noise Averaging Device	Zolo Technologies, Inc.	Utility - DIV	JP	2011-014263		Abandoned	2025-02-02
Optical Mode Noise Averaging Device	Zolo Technologies, Inc.	Utility - NSPCT	KR	10-2006-7020404	10-1212439	Issued	2025-02-02
Optical Mode Noise Averaging Device	Zolo Technologies, Inc.	Utility - NSPCT	US	10/599,233	7787728	Issued	2025-04-30
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - NSPCT	CN	200480008733.4	ZL200480008733.4	Issued	2024-03-31
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - DIV	CN	200810168100.X		Abandoned	2010-03-17
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - DIV	CN	200810168101.4	ZL200810168101.4	Issued	2024-03-31
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - NSPCT	EP	04749622.9		Published	2024-03-31
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - NSPCT	IN	1946/KOLNP/2005	223380	Issued	2024-03-31

Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - NSPCT	JP	2006-509589		Abandoned	2010-01-07
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - DIV	JP	2009-025174		Abandoned	2024-03-31
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - DIV	JP	JP2009-253750	4927925	Issued	2024-03-31
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - DIV	JP	2012-180951	5395232	Issued	2024-03-31
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - NSPCT	KR	10-2005-7018665	10-1072657	Issued	2024-03-31
Method and Apparatus for the Monitoring and Control of Combustion	Zolo Technologies, Inc.	Utility - NSPCT	US	10/543,288	7248755	Issued	2024-03-31
Method For The Monitoring And Control Of A Process	Zolo Technologies, Inc.	Utility - CON	US	11/782,475	7729566	Issued	2024-06-04
Method and Apparatus For The Monitoring And Control Of A Process	Zolo Technologies, Inc.	Utility - CON	US	11/782,481	7389027	Issued	2024-03-31
Method and Apparatus For The Monitoring And Control Of A Process	Zolo Technologies, Inc.	Utility - CON	US	11/782,483		Abandoned	2024-03-31
Method and Apparatus For The Monitoring And Control Of A Process	Zolo Technologies, Inc.	Utility - CON	US	11/782,492	7469092	Issued	2024-03-31
Echelle Grating Optical Multiplexer with Widely Spaced Wavelengths	Zolo Technologies, Inc.	Prov - ORG	US	60/459,108		Expired	2004-03-31
Generation of a Grating-Based, Fiber-Coupled Fluorescence Filter with Select Filter Function	Zolo Technologies, Inc.	Prov - ORG	US	60/515,520		Abandoned	2004-09-23
Two Line Gas Spectroscopy Calibration	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US2006/38933		Completed	
Two Line Gas Spectroscopy Calibration	Zolo Technologies, Inc.	Utility - NSPCT	AU	2006299372		Abandoned	2026-10-04
Two Line Gas Spectroscopy Calibration	Zolo Technologies, Inc.	Utility - NSPCT	CA	2,620,151		Abandoned	2026-10-04

Two Line Gas Spectroscopy Calibration	Zolo Technologies, Inc.	Utility - NSPCT	CN	200680035794.9	ZL200680035794.9	Issued	2026-10-04
Two Line Gas Spectroscopy Calibration	Zolo Technologies, Inc.	Utility - NSPCT	EP	06816299.9		Abandoned	2026-10-04
Two Line Gas Spectroscopy Calibration	Zolo Technologies, Inc.	Utility - NSPCT	IN	711/KOLNP/2008	263850	Issued	2026-10-04
Two Line Gas Spectroscopy Calibration	Zolo Technologies, Inc.	Utility - NSPCT	JP	2008-534678		Abandoned	2026-10-04
Two Line Gas Spectroscopy Calibration	Zolo Technologies, Inc.	Utility - ORG	US	12/067,789	7787123	Issued	2027-07-17
TWO LINE OXYGEN PURGE AIR CALIBRATION	Zolo Technologies, Inc.	Prov - ORG	US	60/723,761		Expired	2006-10-04
All-Fiber Architecture for an Embedded Flight Sensor for Aero propulsion Applications	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US06/60931		Completed	
All-Fiber Architecture for an Embedded Flight Sensor for Aero propulsion Applications	Zolo Technologies, Inc.	Utility - NSPCT	EP	06851944.6		Abandoned	2026-11-15
All-Fiber Architecture for an Embedded Flight Sensor for Aero propulsion Applications	Zolo Technologies, Inc.	Utility - DIV	EP	11195700.7		Abandoned	2026-11-15
All-Fiber Architecture for an Embedded Flight Sensor for Aero propulsion Applications	Zolo Technologies, Inc.	Utility - NSPCT	JP	2008-542498		Abandoned	2026-11-15
All-Fiber Architecture for an Embedded Flight Sensor for Aero propulsion Applications	Zolo Technologies, Inc.	Utility - NSPCT	US	12/093,412		Abandoned	2026-11-15
ALL-FIBER ARCHITECTURE FOR AN EMBEDDED FLIGHT SENSOR FOR AEROPROPULSION APPLICATIONS	Zolo Technologies, Inc.	Prov - ORG	US	60/737,453		Expired	2006-11-15
Method and Apparatus for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US06/60572		Completed	
Method and Apparatus for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - NSPCT	EP	06850383.8	1952003	Issued	2026-11-06



Method and Apparatus for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - EPPAT	DE	06850383.8	1952003	Issued	2026-11-06
Method and Apparatus for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - EPPAT	ES	06850383.8	1952003	Issued	2026-11-06
Method and Apparatus for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - EPPAT	FR	06850383.8	1952003	Issued	2026-11-06
Method and Apparatus for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - EPPAT	GB	06850383.8	1952003	Issued	2026-11-06
Method and Apparatus for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - EPPAT	IT	06850383.8	1952003	Issued	2026-11-06
Method and Apparatus for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - EPPAT	SE	06850383.8	1952003	Issued	2026-11-06
Method and Apparatus for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - NSPCT	JP	2008-539167	5180088	Issued	2026-11-06
Method and Apparatus for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - NSPCT	US	12/092,673	8544279	Issued	2030-05-24
Technique for Spectroscopic Measurements in the Combustion Zone of Gas Turbine Engines	Zolo Technologies, Inc.	Prov - ORG	US	60/733,431		Expired	2006-11-04
Method and Apparatus for Monitoring Gases in Fluid Tanks	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US08/54600		Abandoned	2009-07-31
Method and Apparatus for Monitoring Gases in Fluid Tanks	Zolo Technologies, Inc.	Prov - ORG	US	60/891,147		Expired	2008-02-22
Binning and Tomography for High Spatial Resolution Temperature and Species Concentration Measurements	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US2008/064703		Completed	

Binning and Tomography for High Spatial Resolution Temperature and Species Concentration Measurements	Zolo Technologies, Inc.	Utility - NSPCT	AU	2008256759		Abandoned	2028-05-23
Binning and Tomography for High Spatial Resolution Temperature and Species Concentration Measurements	Zolo Technologies, Inc.	Utility - NSPCT	CA	2,685,929		Abandoned	2028-05-23
Method of Performing Absorption Spectroscopy and Apparatus for Absorption Spectroscopy (amended)	Zolo Technologies, Inc.	Utility - NSPCT	CN	200880017330.4	ZL 200880017330.4	Issued	2028-05-23
Binning and Tomography for High Spatial Resolution Temperature and Species Concentration Measurements	Zolo Technologies, Inc.	Utility - NSPCT	EP	08769702.5		Published	2028-05-23
Binning and Tomography for High Spatial Resolution Temperature and Species Concentration Measurements	Zolo Technologies, Inc.	Utility - NSPCT	IN	3796/KOLNP/2009		Abandoned	2028-05-23
Binning and Tomography for High Spatial Resolution Temperature and Species Concentration Measurements	Zolo Technologies, Inc.	Utility - NSPCT	JP	2010-509569		Abandoned	2028-05-23
Binning and Tomography for High Spatial Resolution Temperature and Species Concentration Measurements	Zolo Technologies, Inc.	Utility - NSPCT	KR	10-2009-7024506		Abandoned	2028-05-23
Binning and Tomography for High Spatial Resolution Temperature and Species Concentration Measurements	Zolo Technologies, Inc.	Utility - NSPCT	US	12/600,034	8255169	Issued	2029-02-04
Binning and Tomography for High Spatial Resolution Temperature and Species Concentration Measurements	Zolo Technologies, Inc.	Prov - ORG	US	60/940,006		Expired	2008-05-24
In Situ Optical Probe and Methods	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US08/79935		Abandoned	2010-03-26
Single-Ended Probe and Methods for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Prov - ORG	US	60/980,315		Expired	2008-10-16
Translational Laser Absorption Spectroscopy Apparatus and Method	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US08/79962		Abandoned	2010-03-26
Translational Laser Absorption Spectroscopy Apparatus and Method	Zolo Technologies, Inc.	Prov - ORG	US	60/980,355		Expired	2008-10-16
Alignment Free Single-Ended Optical Probe and Methods for Spectroscopic Measurements in a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - ORG	US	12/359,900		Abandoned	2029-01-26

Method and Apparatus for Spectroscopic Measurements	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US10/20132		Abandoned	
Method and Apparatus for Spectroscopic Measurements	Zolo Technologies, Inc.	Utility - NSPCT	EP	10772402.3		Abandoned	2030-01-05
Method and Apparatus for Spectroscopic Measurements	Zolo Technologies, Inc.	Utility - NSPCT	JP	PCT/US10/20132		Abandoned	2030-01-05
Alignment Free Single-Ended Optical Probe and Methods for Spectroscopic Measurements in the Combustion Zone of a Gas Turbine Engine	Zolo Technologies, Inc.	Prov - ORG	US	61/019,171		Expired	2009-01-04
Alignment Free Single-Ended Optical Probe and Methods for Spectroscopic Measurements in a Gas Turbine Engine	Zolo Technologies, Inc.	Prov - ORG	US	61/143,109		Expired	2010-01-07
Fiber With Mode Noise Reducing Geometry	Zolo Technologies, Inc.	Prov - ORG	US	61/080,959		Expired	2009-07-15
Method and Apparatus for Utilizing Laser Hysteresis for an in situ Evaluation of Background Emission and Offsets in TDLAS Measurements	Zolo Technologies, Inc.	Prov - ORG	US	61/104,525		Expired	2009-10-10
Method and Apparatus for Monitoring Combustion Properties in an Interior of a Boiler	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US10/20345		Completed	
Method and Apparatus for Monitoring Combustion Properties in an Interior of a Boiler	Zolo Technologies, Inc.	Utility - NSPCT	AU	2010203674	2010203674	Issued	2030-01-07
Method and Apparatus for Monitoring Combustion Properties in an Interior of a Boiler	Zolo Technologies, Inc.	Utility - NSPCT	CA	2,748,793	2748793	Issued	2030-01-07
Method and Apparatus for Monitoring Combustion Properties in an Interior of a Boiler	Zolo Technologies, Inc.	Utility - NSPCT	CN	201080006508.2	ZL 201080006508.2	Issued	2030-01-07
Method and Apparatus for Monitoring Combustion Properties in an Interior of a Boiler	Zolo Technologies, Inc.	Utility - NSPCT	EP	10729501.6		Published	2030-01-07
Method and Apparatus for Monitoring Combustion Properties in an Interior of a Boiler	Zolo Technologies, Inc.	Utility - NSPCT	IN	2776/KOLP/2011		Published	2030-01-07
Method and Apparatus for Monitoring Combustion Properties in an Interior of a Boiler	Zolo Technologies, Inc.	Utility - NSPCT	JP	2011-545421	5576399	Issued	2030-01-07

Method and Apparatus for Monitoring Combustion Properties in an Interior of a Boiler	Zolo Technologies, Inc.	Utility - NSPCT	KR	10-2011-7015677	10-1674694	Issued	2030-01-07
Method and Apparatus for Monitoring Combustion Properties in an Interior of a Boiler	Zolo Technologies, Inc.	Utility - ORG	US	13/142,791	8786856	Issued	2031-10-03
Method and Apparatus for Monitoring Combustion Properties in an Interior of a Boiler	Zolo Technologies, Inc.	Prov - ORG	US	61/143,732		Expired	2010-01-09
Method and Apparatus for Monitoring Combustion Properties in an Interior of a Boiler	Zolo Technologies, Inc.	Prov - ORG	US	61/144,384		Expired	2010-01-13
Mitigation of Optical Signal Noise Using a Multimode Transmit Fiber	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US10/45077		Completed	
Mitigation of Optical Signal Noise Using a Multimode Transmit Fiber	Zolo Technologies, Inc.	Utility - NSPCT	AU	2010282589	2010282589	Issued	2030-08-10
Mitigation of Optical Signal Noise Using a Multimode Transmit Fiber	Zolo Technologies, Inc.	Utility - NSPCT	CN	201080041719.X	ZL201080041719.X	Issued	2030-08-10
Mitigation of Optical Signal Noise Using a Multimode Transmit Fiber	Zolo Technologies, Inc.	Utility - NSPCT	EP	10808655.4		Published	2030-08-10
Mitigation of Optical Signal Noise Using a Multimode Transmit Fiber	Zolo Technologies, Inc.	Utility - NSPCT	JP	2012-524791	5856058	Issued	2030-08-10
Mitigation of Optical Signal Noise Using a Multimode Transmit Fiber	Zolo Technologies, Inc.	Utility - NSPCT	KR	10-2012-7003681	10-1716917	Issued	2030-08-10
Mitigation of Optical Signal Noise Using a Multimode Transmit Fiber	Zolo Technologies, Inc.	Utility - NSPCT	RU	2012108628	2530686	Issued	2030-08-10
Mitigation of Optical Signal Noise Using a Multimode Transmit Fiber	Zolo Technologies, Inc.	Utility - NSPCT	US	13/389,902	8786857	Issued	2031-01-15
Mitigation of Optical Signal Noise Using a Multimode Transmit Fiber	Zolo Technologies, Inc.	Prov - ORG	US	61/232,732		Expired	2010-08-10
Single Ended Probe Improved Optics Design	Zolo Technologies, Inc.	Prov - ORG	US			Closed	2009-10-09
Processing Algorithm for High Pressure/Temperature Spectroscopic Measurements	Zolo Technologies, Inc.	Prov - ORG	US			Closed	

Time-Synchronized TDLAS Measurements for Pressure and Temperature in a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US2011/035954		Completed	
Time-Synchronized TDLAS Measurements for Pressure and Temperature in a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - NSPCT	US	13/696,630	8699011	Issued	2031-05-10
Time-Synchronized TDLAS Measurements for Pressure and Temperature in a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - NSPCT	EP	11781158.8		Pending	2031-05-10
Time-Synchronized TDLAS Measurements for Pressure and Temperature in a Gas Turbine Engine	Zolo Technologies, Inc.	Utility - ORG	JP	2013-510250	5844800	Issued	2031-05-10
Time-Synchronized TDLAS Measurements for Pressure and Temperature in a Gas Turbine Engine	Zolo Technologies, Inc.	Prov - ORG	US	61/333,143		Expired	2011-05-10
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US13/32479		Completed	
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - NSPCT	CA	2,871,072		Pending	2033-03-15
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - NSPCT	CN	201380029592.3	ZL 201380029592.3	Issued	2033-03-15
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - NSPCT	EP	13779007.7	2839265	Published	2033-03-15
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - EPPAT	DE	13779007.7	2839265	Issued	2033-03-15
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - EPPAT	ES	13779007.7	2839265	Issued	2033-03-15
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - EPPAT	FR	13779007.7	2839265	Issued	2033-03-15
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - EPPAT	GB	13779007.7	2839265	Issued	2033-03-15
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - EPPAT	IT	13779007.7	2839265	Issued	2033-03-15
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - EPPAT	SE	13779007.7	2839265	Issued	2033-03-15

In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - NSPCT	JP	JP2015-507013	6196289	Issued	2033-03-15
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - NSPCT	KR	10-2014-7032490		Pending	2033-03-15
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Utility - ORG	US	14/395,037	9366621	Issued	2033-08-04
In-Furnace Retro-Reflectors with Steerable Tunable Diode Laser Absorption Spectrometer	Zolo Technologies, Inc.	Prov - ORG	US	61/635,733		Expired	2013-04-19
Mode Noise Reduction Apparatus and Method	Zolo Technologies, Inc.	Prov - ORG	US	61/652,007		Expired	2013-05-25
Method and Apparatus for Monitoring Port Blockage for TDLAS Measurements in Harsh Environments	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US14/71839		Completed	
Method and Apparatus for Monitoring Port Blockage for TDLAS Measurements in Harsh Environments	Zolo Technologies, Inc.	Utility - NSPCT	CA	2,934,271		Pending	2034-12-22
Method and Apparatus for Monitoring Port Blockage for TDLAS Measurements in Harsh Environments	Zolo Technologies, Inc.	Utility - NSPCT	CN	201480073474.7		Pending	2034-12-22
Method and Apparatus for Monitoring Port Blockage for TDLAS Measurements in Harsh Environments	Zolo Technologies, Inc.	Utility - NSPCT	EP	14872360.4		Pending	2034-12-22
Method and Apparatus for Monitoring Port Blockage for TDLAS Measurements in Harsh Environments	Zolo Technologies, Inc.	Utility - NSPCT	JP	2016-541179		Pending	2034-12-22
Method and Apparatus for Monitoring Port Blockage for TDLAS Measurements in Harsh Environments	Zolo Technologies, Inc.	Utility - NSPCT	KR	10-2016-7018639		Pending	2034-12-22
Method and Apparatus for Monitoring Port Blockage for TDLAS Measurements in Harsh Environments	Zolo Technologies, Inc.	Utility - NSPCT	US	15/104,795		Pending	
Method and Apparatus for Monitoring Port Blockage for TDLAS Measurements in Harsh Environments	Zolo Technologies, Inc.	Prov - ORG	US	61/919,228		Expired	2014-12-20
TDLAS Architecture for Widely Spaced Wavelengths	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US15/61387		Pending	
TDLAS Architecture for Widely Spaced Wavelengths	Zolo Technologies, Inc.	Utility - NSPCT	AU	2015370309		Pending	2035-11-18

TDLAS Architecture for Widely Spaced Wavelengths	Zolo Technologies, Inc.	Utility - NSPCT	CA	2,972,253		Pending	2035-11-18
TDLAS Architecture for Widely Spaced Wavelengths	Zolo Technologies, Inc.	Utility - NSPCT	CN	201580070872.8		Pending	2035-11-18
TDLAS Architecture for Widely Spaced Wavelengths	Zolo Technologies, Inc.	Utility - NSPCT	EP	15873925.0		Pending	2035-11-18
TDLAS Architecture for Widely Spaced Wavelengths	Zolo Technologies, Inc.	Utility - NSPCT	IN	201737019704		Pending	2035-11-18
TDLAS Architecture for Widely Spaced Wavelengths	Zolo Technologies, Inc.	Utility - NSPCT	JP	2017-533919		Pending	2035-11-18
TDLAS Architecture for Widely Spaced Wavelengths	Zolo Technologies, Inc.	Utility - NSPCT	KR	10-2017-7020489		Pending	2035-11-18
TDLAS Architecture for Widely Spaced Wavelengths	Zolo Technologies, Inc.	Utility - NSPCT	RU	2017118426		Pending	2035-11-18
TDLAS Architecture for Widely Spaced Wavelengths	Zolo Technologies, Inc.	Utility - NSPCT	US	15/538,156		Pending	
TDLAS Architecture for Widely Spaced Wavelengths	Zolo Technologies, Inc.	Prov - ORG	US	62/096,426		Expired	2015-12-23
Method and Apparatus for Verification of TDLAS System Operation	Zolo Technologies, Inc.	Utility - ORG	WO	PCT/US17/23392		Pending	
Method and Apparatus for Verification of TDLAS System Operation	Zolo Technologies, Inc.	Prov - ORG	US	62/321,634		Pending	
Swept Frequency Phase Modulation for Mode Noise Mitigation	Zolo Technologies, Inc.	Utility - ORG	US			Closed	
Zolo 59 – Carbon injection efficiency in steel making operations	Zolo Technologies, Inc.	Invention disclosure	US			Unfiled	
Zolo 60 – EAF measurement redundancy to mitigate system component failure	Zolo Technologies, Inc.	Invention disclosure	US			Unfiled	

Zolo 61 – Advanced EAF/BOF operations (multiple paths)	Zolo Technolo gies, Inc.	Invent ion disclos ure	US			Unfiled	
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**SCHEDULE 3**

**Marks**

Zolo Technologies, Inc.