

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6169531

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	SECURITY INTEREST	
CONVEYING PARTY DATA		
Name		Execution Date
NLIGHT, INC.		04/10/2020
RECEIVING PARTY DATA		
Name:	PACIFIC WESTERN BANK	
Street Address:	406 BLACKWELL STREET	
Internal Address:	SUITE 240	
City:	DURHAM	
State/Country:	NORTH CAROLINA	
Postal Code:	27701	
PROPERTY NUMBERS Total: 44		
Property Type	Number	
Application Number:	16820556	
Application Number:	16786957	
Application Number:	16745242	
Application Number:	62968087	
Application Number:	62968085	
Application Number:	62968110	
Application Number:	62966431	
Application Number:	62964461	
Application Number:	16730880	
Application Number:	62953351	
Application Number:	16711174	
Application Number:	16693806	
Application Number:	62939404	
Application Number:	16653695	
Application Number:	16598210	
Application Number:	62908508	
Application Number:	62908518	
Application Number:	16577981	
Application Number:	62902272	

PATENT

Property Type	Number
Application Number:	16570297
Application Number:	16550058
Application Number:	62886907
Application Number:	62886912
Application Number:	62885946
Application Number:	62883592
Application Number:	62882442
Application Number:	62867694
Application Number:	62865902
Application Number:	62861899
Application Number:	62857537
Application Number:	16427211
Application Number:	62852511
Application Number:	16417337
Application Number:	16402147
Application Number:	16395057
Application Number:	16817450
Application Number:	16817357
Application Number:	16299049
Application Number:	16809314
Application Number:	62787164
Application Number:	16192696
Application Number:	62650907
Application Number:	14508684
Application Number:	14450162

CORRESPONDENCE DATA

Fax Number: (919)282-3941

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: 919-314-3086

Email: diligencereview@square1bank.com

Correspondent Name: PACIFIC WESTERN BANK

Address Line 1: 406 BLACKWELL STREET

Address Line 2: SUITE 240

Address Line 4: DURHAM, NORTH CAROLINA 27701

NAME OF SUBMITTER:	NICHOLAS NANCE
---------------------------	----------------

SIGNATURE:	/NicholasNance- TKF/
-------------------	----------------------

DATE SIGNED:	06/24/2020
---------------------	------------

Total Attachments: 14

source=IPSA nL signed 2020 0619#page1.tif
source=IPSA nL signed 2020 0619#page2.tif
source=IPSA nL signed 2020 0619#page3.tif
source=IPSA nL signed 2020 0619#page4.tif
source=IPSA nL signed 2020 0619#page5.tif
source=IPSA nL signed 2020 0619#page6.tif
source=IPSA nL signed 2020 0619#page7.tif
source=IPSA nL signed 2020 0619#page8.tif
source=IPSA nL signed 2020 0619#page9.tif
source=IPSA nL signed 2020 0619#page10.tif
source=IPSA nL signed 2020 0619#page11.tif
source=IPSA nL signed 2020 0619#page12.tif
source=IPSA nL signed 2020 0619#page13.tif
source=IPSA nL signed 2020 0619#page14.tif

**SUPPLEMENT
TO
INTELLECTUAL PROPERTY SECURITY AGREEMENT
AND RESTATEMENT OF EXHIBITS**

This Supplement to Intellectual Property Security Agreement and Restatement of Exhibits is entered into as of April 10, 2020 by and between PACIFIC WESTERN BANK ("Bank") and NLIGHT, INC., formerly known as NLIGHT PHOTONICS CORPORATION ("Grantor").

RECITALS

A. Bank (as successor in interest by merger to Square 1 Bank), and Grantor previously entered into an Intellectual Property Security Agreement (the "IP Security Agreement"), dated as of the "Effective Date" (which was March 13, 2014). (Capitalized terms that are used but not defined herein shall have the meanings provided for in the IP Security Agreement.)

B. Bank and Grantor now desire to amend and supplement the IP Security Agreement as set forth herein.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, the parties hereby represent, warrant, covenant and agree as follows:

AGREEMENT

The IP Security Agreement is hereby amended and supplemented by amending and restating the Exhibits thereto to include the Intellectual Property listed on Exhibit A attached hereto to Exhibit A of the IP Security Agreement, the Intellectual Property listed on Exhibit B attached hereto to Exhibit B of the IP Security Agreement, the Intellectual Property listed on Exhibit C attached hereto to Exhibit C of the IP Security Agreement, and the Intellectual Property listed on Exhibit D attached hereto to Exhibit D of the IP Security Agreement. References to Exhibits contained in the IP Security Agreement shall be deemed to refer to such Exhibits as amended and restated by the Exhibits attached hereto. Without limitation on the generality of the foregoing, (1) Grantor grants and pledges to Bank a security interest in all of Grantor's right, title and interest in, to and under the intellectual property described on the Exhibits hereto (including without limitation the patents, trademarks, copyrights and Mask Works, if any, described thereon, and including without limitation (a) any and all claims for damages by way of past, present and future infringements of any of the intellectual property rights, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights, (b) all licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights, (c) all amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works, and (d) all proceeds and products of the intellectual property, including without limitation all payments under insurance or any indemnity or

warranty payable in respect of any of the intellectual property), and (2) Grantor represents and warrants to Bank that, other than as set forth on the Exhibits to the IP Security Agreement (as amended and restated by the Exhibits hereto), it has no trademarks or patents registered with the United States Patent and

Trademark Office, or copyrights or mask works registered with the United States Copyright Office, or any pending applications therefor.

This Agreement is part of the IP Security Agreement and the provisions thereof are incorporated herein. The parties are authorized to attach to the IP Security Agreement a copy of the Exhibits hereto, and to delete all prior exhibits. This Agreement may be executed in any number of, and by different parties hereto on, separate counterparts, all of which, when so executed, shall be deemed an original, for all such counterparts shall constitute one and the same agreement.

IN WITNESS WHEREOF, the parties have caused this Supplement to Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

NLIGHT, INC.

By: Kerry Hill

Name: Kerry Hill

Title: VP Finance - HR

BANK:

PACIFIC WESTERN BANK

By: John Weston

Name: John Weston

Title: SVP

EXHIBIT A

COPYRIGHTS

DESCRIPTION	REGISTRATION/ APPLICATION NUMBER	REGISTRATION/ APPLICATION DATE
None.		

EXHIBIT B

PATENTS

TITLE	APPLICATION DATE	ISSUE DATE	PENDING SERIAL No.	ISSUED SERIAL No.
METHODS FOR SRS PROTECTION OF LASER COMPONENTS AND APPARATUS PROVIDING SRS PROTECTION	2019-12-31		PCT/US19/69092	
LASER BURST LOGGING SYSTEMS AND METHODS	2020-03-16		16/820,556	
OPTIMIZATION OF HIGH RESOLUTION DIGITALLY ENCODED LASER SCANNERS FOR FINE FEATURE MARKING	2020-02-10		16/786,957	
SCANNER DRIFT COMPENSATION FOR LASER MATERIAL PROCESSING	2020-01-16		16/745,242	
THERMAL PATH OPTIMIZED OPTICAL SIGNAL COMBINER HOUSING	2020-01-30		62/968,087	
CAPILLARY CLADDING LIGHT STRIPPER FOR COMBINERS	2020-01-30		62/968,085	
MULTI-BAND PUMPING OF DOPED FIBER LASERS	2020-01-30		62/968,110	
STEPPED WINDOW	2020-01-27		62/966,431	
ALL-FIBER DIVERGENCE LIMITER	2020-01-22		62/964,461	
FIBER WITH DEPRESSED CENTRAL INDEX FOR INCREASED BEAM PARAMETER PRODUCT	2019-12-30		16/730,880	
CORROSION RESISTANT HEATSINK METHOD, SYSTEM, AND APPARATUS	2019-12-24		62/953,351	
METHOD, SYSTEM AND APPARATUS FOR DIFFERENTIAL CURRENT INJECTION	2019-12-20		PCT/US19/68150	
TWO-PHASE COOLED FIBER COUPLED DIODE LASER PACKAGE	2019-12-20		PCT/US19/68143	
OPTICAL FIBER DEVICES AND METHODS FOR DIRECTING STIMULATED RAMAN SCATTERING (SRS) LIGHT OUT OF A FIBER	2019-12-19		PCT/US19/67545	
OPTICAL FIBER DEVICES AND METHODS FOR DIRECTING STIMULATED RAMAN SCATTERING (SRS) LIGHT OUT OF A FIBER CORE AND INTO A CLADDING	2019-12-19		PCT/US19/67547	
OPTICAL FIBER DEVICES AND METHODS FOR REDUCING STIMULATED RAMAN SCATTERING (SRS) LIGHT EMISSIONS FROM A RESONANT CAVITY	2019-12-19		PCT/US19/67549	
OPTICAL FIBER DEVICES AND METHODS FOR REDUCING STIMULATED RAMAN SCATTERINGS (SRS) LIGHT INTENSITY IN SIGNAL COMBINED SYSTEMS	2019-12-19		PCT/US19/67548	
OPTICAL FIBER DEVICES AND METHODS FOR SUPPRESSING STIMULATED RAMAN SCATTERING (SRS) LIGHT THROUGH GUIDED MODE COUPLING	2019-12-19		PCT/US19/67544	
HIGH-POWER, SINGLE-MODE FIBER SOURCES	2019-12-11		16/711,174	
DIODE LASER PACKAGE FOR BIDIRECTIONALLY EMITTING SEMICONDUCTOR LASER DEVICES	2019-11-25		16/693,806	
FIBER-BASED ANGULAR HOMOGENIZER	2019-11-22		62/939,404	
HEAT SINK FORMED FROM A HIGH PIPE DENSITY SILICON CARBIDE SUBSTRATE	2019-10-15		16/653,695	

SHORT PULSE FIBER LASER FOR LTPS CRYSTALLIZATION	2019-10-10		16/598,210	
CLADLESS FIBER FOR FIBER LASER PUMP AND COMBINER	2019-09-30		62/908508	
STRAIN-ENGINEERED CLADDING LAYER FOR OPTIMIZED ACTIVE REGION STRAIN AND IMPROVED LASER DIODE PERFORMANCE	2019-09-30		62/908518	
OPTICAL FIBER CLADDING LIGHT STRIPPER	2019-09-20		16/577,981	
LASER DIODE SYSTEM WITH LOW NUMERICAL APERTURE CLAD LIGHT STRIPPING	2019-09-18		62/902272	
BIDIRECTIONALLY EMITTING SEMICONDUCTOR LASER DEVICES	2019-09-13		16/570297	
SCANNER CALIBRATION TEST PLATE	2019-08-30		16/557,863	
CLAD LIGHT STRIPPER WITH FIBER CONVERSION	2019-08-23		16/550,058	
HIGH BRIGHTNESS FIBER COUPLED DIODE LASERS WITH CIRCULARIZED BEAMS	2019-08-14		62/886907	
VARIABLE MAGNIFICATION AFOCAL TELESCOPE ELEMENT	2019-08-14		62/886912	
HIGHER ORDER MODE SUPPRESSED LASER (HOMSL) WITH SUPPRESSED THERMAL GUIDE	2019-08-13		62/885946	
FIBER-BASED OPTICAL MODULATOR	2019-08-06		62/883592	
FUNCTIONALLY HOMOGENIZED INTENSITY DISTRIBUTION FOR ADDITIVE MANUFACTURING OR OTHER APPLICATIONS	2019-08-02		62/882442	
REVERSE PUMPED FIBER AMPLIFIER WITH CLADDING LIGHT STRIPPER BETWEEN SEGMENTS OF ACTIVE FIBER	2019-06-27		62/867694	
FIBER MANAGEMENT CARTRIDGE	2019-06-25		16/452403	
FUNCTIONALLY HOMOGENIZED ANNULAR INTENSITY DISTRIBUTION WITH WIDE RAYLEIGH RANGE FOR ADDITIVE MANUFACTURING	2019-06-24		62/865902	
SAFE MODE OPERATION OF FIBER LASERS TO PROTECT DOWN STREAM COMPONENTS FROM EXCESSIVE PUMP TRANSMISSION	2019-06-14		62/861899	
FIBER LASER INSENSITIVE AIMING LASER	2019-06-05		62/857537	
LARGE OPTICAL CAVITY (LOC) LASER DIODE HAVING QUANTUM WELL OFFSET AND EFFICIENT SINGLE MODE LASER EMISSION ALONG FAST AXIS	2019-05-30		16/427211	
APPARATUSES FOR SCATTERING LIGHT AND METHODS OF FORMING APPARATUSES FOR SCATTERING LIGHT	2019-05-24		62/852511	
BACK-REFLECTION PROTECTION AND MONITORING IN FIBER AND FIBER-DELIVERED LASERS	2019-05-20		16/417337	
ADJUSTABLE BEAM CHARACTERISTICS	2019-05-02		16/402147	
SLANTED FBG FOR SRS SUPPRESSION	2019-04-25		16/395057	
FOCUS ASSESSMENT IN DYNAMICALLY FOCUSED LASER SYSTEM	2020-03-12		16/817,450	
METHOD OF PROCESSING CALIBRATION DATA IN 3D LASER SCANNER SYSTEMS	2019-04-18		16/388613	
SPUN ROUND CORE FIBER	2019-04-11		16/381836	
LOW COST OPTICAL PUMP LASER PACKAGE	2019-04-02		16/372963	
SINGLE MODE LMA (LARGE MODE AREA) FIBER	2019-04-01		16/372036	

CALIBRATION VALIDATION IN GALVANOMETRIC SCANNING SYSTEMS	2020-03-12		16/817,357	
PASSIVELY ALIGNED SINGLE ELEMENT TELESCOPE FOR IMPROVED PACKAGE BRIGHTNESS	2019-03-14		16/353586	
FIBER LASER HAVING VARIABLY WOUND OPTICAL FIBER	2019-03-11		16/299049	
HIGH-NUMERICAL APERTURE LIGHT STRIPPER	2019-03-06		16/294803	
LASER BURST LOGGING SYSTEMS AND METHODS	2019-03-05		16/293559	
METHOD TO MAINTAIN AND CONTROL THE POLARIZATION STATE FROM 3C OPTICAL FIBER	2020-03-04		16/809314	
DIODE LASER APPARATUS WITH FAC LENS OUT-OF-PLANE BEAM STEERING	2019-02-06		16/269387	
HIGH BRIGHTNESS LOW SWAP FIBER-COUPLED PACKAGE	2018-12-31		62/787164	
SPECTRALLY MULTIPLEXING DIODE PUMP MODULES TO IMPROVE BRIGHTNESS	2018-12-03	2019-09-17	16/208111	10418774
TANDEM PUMPED FIBER AMPLIFIER	2018-11-26		16/200462	
HIGH-POWER LASER DIODE PACKAGE IMPLEMENTED WITH MENISCUS SLOW AXIS COLLIMATOR FOR REDUCED DIODE PACKAGE FOOTPRINT OR IMPROVED LASER OUTPUT BRIGHTNESS	2018-11-15		16/192696	
LIGHT TRAP FOR HIGH POWER FIBER LASER CONNECTOR	2018-10-11	2019-08-06	16/158135	10374378
LOW SIZE AND WEIGHT, HIGH POWER FIBER LASER PUMP	2018-10-08		16/154510	
HIGH POWER LASER SYSTEM	2018-10-02		16/149712	
LASER PATTERNING OF MULTI-LAYER STRUCTURES	2018-09-25		16/141504	
CTE-MATCHED SILICON-CARBIDE SUBMOUNT WITH HIGH THERMAL CONDUCTIVITY CONTACTS	2018-08-01		16/052517	
FIBER SOURCE WITH CASCADED GAIN STAGES AND/OR MULTIMODE DELIVERY FIBER WITH LOW SPLICE LOSS	2018-07-06		16/028694	
LASER OPTICAL FIBER TRAY	2018-05-14	2019-10-08	15/979040	10436997
FAST AXIS BEAM STEERING	2018-03-30		62/650907	
ADDITIVE MANUFACTURING SYSTEMS AND METHODS FOR THE SAME	2018-03-28		15/939090	
BEAM MODIFICATION STRUCTURES AND METHODS OF MODIFYING OPTICAL BEAM CHARACTERISTICS USING THE BEAM MODIFICATION STRUCTURES	2018-03-28		15/938925	
DYNAMIC ASPECT RATIO RECTANGULAR LASER BEAMS	2018-03-28		15/939234	
FIBER OPTICAL BEAM DELIVERY DEVICE PRODUCING OUTPUT EXHIBITING INTENSITY DISTRIBUTION PROFILE HAVING NON-ZERO ELLIPTICITY	2018-03-28		15/937652	
FIBER OPTICAL BEAM DELIVERY DEVICE PRODUCING SELECTABLE INTENSITY PROFILES	2018-03-28		15/939138	
FIBER-COUPLED DEVICE FOR VARYING BEAM CHARACTERISTICS	2018-03-28		15/939064	
FIBER-COUPLED LASER WITH TIME VARYING BEAM CHARACTERISTICS	2018-03-28		15/939136	
FREQUENCY-CONVERTED OPTICAL BEAMS HAVING ADJUSTABLE BEAM CHARACTERISTICS	2018-03-28		15/939223	
METHODS OF AND SYSTEMS FOR MATERIALS PROCESSING USING OPTICAL BEAMS	2018-03-28		15/938790	
MULTI-WAVELENGTH FIBER LASER	2018-03-28		15/939197	

OPTICAL BEAM DELIVERY DEVICE FORMED OF OPTICAL FIBERS CONFIGURED FOR BEAM DIVERGENCE OR MODE COUPLING CONTROL	2018-03-28		15/938854	
OPTICAL FIBER BENDING MECHANISMS	2018-03-28		15/938959	
OPTICAL POWER DENSITY CONTROL IN FIBER-COUPLED LASER	2018-03-28		15/939111	
PRODUCTION OF TEMPORALLY APPARENT INTENSITY DISTRIBUTION BY RAPID PERTURBATION OF VARIABLE BEAM CHARACTERISTICS OPTICAL FIBER	2018-03-28		15/939148	
SYSTEMS AND METHODS FOR MODIFYING BEAM CHARACTERISTICS	2018-03-28		15/939141	
BEAM OFFSET PLATE FOR OPTICALLY OFFSETTING ONE OR MORE LASER BEAMS	2018-03-27		15/937584	
SYSTEMS FOR AND METHODS OF TEMPERATURE CONTROL IN ADDITIVE MANUFACTURING	2018-03-27		15/936780	
ALL-FIBER OPTICAL BEAM SWITCH	2018-03-24		15/934959	
MULTI-FUNCTION SEMICONDUCTOR AND ELECTRONICS PROCESSING	2018-03-23		15/934714	
MULTICORE FIBER-COUPLED OPTICAL PROBING TECHNIQUES	2018-03-22		15/933183	
MULTI-OPERATION LASER TOOLING FOR DEPOSITION AND MATERIAL PROCESSING OPERATIONS	2018-03-22		15/933160	
FIBER-BASED OPTICAL MODULATOR	2018-03-16		15/924096	
FIBER-BASED SATURABLE ABSORBER	2018-03-16		15/924090	
SCALABLE HIGH POWER FIBER LASER	2018-03-05		15/912034	
METHOD AND SYSTEM FOR CUTTING A MATERIAL USING A LASER HAVING ADJUSTABLE BEAM CHARACTERISTICS	2018-02-27		15/906728	
METHODS OF AND SYSTEMS FOR HEAT DEPOSITION IN ADDITIVE MANUFACTURING	2018-02-26		15/904861	
USE OF VARIABLE BEAM PARAMETERS TO CONTROL A MELT POOL	2018-01-31		15/885633	
USE OF VARIABLE BEAM PARAMETERS TO CONTROL SOLIDIFICATION OF A MATERIAL	2018-01-31		15/885563	
METHODS OF AND SYSTEMS FOR PROCESSING USING ADJUSTABLE BEAM CHARACTERISTICS	2018-01-30		15/883480	
METHOD OF FORMING PORES IN THREE-DIMENSIONAL OBJECTS	2018-01-29		15/882292	
METHOD OF FORMING THREE-DIMENSIONAL OBJECTS	2018-01-29		15/882870	
TANDEM PUMPED FIBER LASER OR FIBER AMPLIFIER	2018-01-11		15/868903	
POWER AND BRIGHTNESS SCALING IN FIBER COUPLED DIODE LASERS USING DIODES WITH OPTIMIZED BEAM DIMENSIONS	2018-01-10		15/867540	
PUMP COMBINER FOR MULTI-CLAD FIBERS	2018-01-02	2018-07-03	15/860559	10014651
LOW COST OPTICAL PUMP LASER PACKAGE	2017-12-20		15/849057	
FIBER LASER PACKAGING	2017-12-14		15/842441	
FIBER PUMP COMBINER	2017-12-07	2019-09-03	15/835298	10404031
HIGH-POWER SINGLE-MODE FIBER SOURCES	2017-11-13		15/810506	
OPTIMIZATION OF HIGH RESOLUTION DIGITALLY ENCODED LASER SCANNERS FOR FINE FEATURE MARKING	2017-11-06		15/804802	

METHOD SYSTEM AND APPARATUS FOR HIGHER ORDER MODE SUPPRESSION	2017-10-27		15/796355	
TANDEM PUMPED FIBER AMPLIFIER	2017-10-12		15/782756	
FIBER LASER FIBER PACKAGING AND THERMAL MANAGEMENT	2017-09-28		15/718889	
SPUN ROUND CORE FIBER	2017-09-12		15/702296	
LASER COOLING SYSTEM	2017-08-28		15/688762	
LASER MODULE SERVICE SHELF	2017-08-25	2019-10-22	15/687093	10451823
LASER OPTICAL FIBER TRAY	2017-08-25	2018-05-15	15/687072	9971116
LASER POWER DISTRIBUTION MODULE	2017-08-25		15/687047	
FIBER COMBINER WITH INPUT PORT DUMP	2017-08-24		15/686096	
SPLICE WITH CLADDING MODE LIGHT STRIPPING	2017-08-24		15/686100	
LOW DIVERGENCE HIGH BRIGHTNESS BROAD AREA LASERS	2017-06-09		16/001734	
ADJUSTABLE BEAM CHARACTERISTICS	2017-05-26	2019-09-24	15/607399	10423015
ADJUSTABLE BEAM CHARACTERISTICS	2017-05-26		15/607411	
ADJUSTABLE BEAM CHARACTERISTICS	2017-05-26		15/607410	
FINE-SCALE TEMPORAL CONTROL FOR LASER MATERIAL PROCESSING	2017-05-22		15/601828	
LIGHT TRAP FOR HIGH POWER FIBER LASER CONNECTOR	2017-05-16	2018-11-27	15/596924	10141707
HIGH-NUMERICAL APERTURE LIGHT STRIPPER	2017-05-15		15/595748	
DOUBLE HELIX COOLANT PATH FOR HIGH POWER FIBER CONNECTOR	2017-05-12	2018-07-03	15/594494	10012810
DISTRIBUTED LASER POWER ARCHITECTURE FOR LASER DIODE ARRAYS	2017-05-11	2018-11-27	15/593251	10141706
LOW SWAP HIGH POWER FIBER AMPLIFIER MODULE	2017-05-01		15/968139	
LOW SIZE AND WEIGHT HIGH POWER FIBER LASER PUMP	2017-04-26	2018-10-23	15/498422	10109978
LOW SWAP TWO-PHASE COOLED DIODE LASER PACKAGE	2017-04-24		15/961750	
HIGH BRIGHTNESS COHERENT MULTI-JUNCTION DIODE LASERS	2017-04-04	2019-10-29	15/479206	10461505
OPTICAL FIDUCIAL GENERATION FOR GALVANOMETRIC SCANNER CALIBRATION	2017-04-04		15/945550	
DIODE LASER PACKAGES WITH FLARED LASER OSCILLATOR WAVEGUIDES	2017-03-20	2018-08-28	15/463672	10063030
SPECTRALLY MULTIPLEXING DIODE PUMP MODULES TO IMPROVE BRIGHTNESS	2017-03-17	2018-12-11	15/462596	10153608
PASSIVELY ALIGNED SINGLE ELEMENT TELESCOPE FOR IMPROVED PACKAGE BRIGHTNESS	2017-02-16		15/435117	
METHOD OF PROCESSING CALIBRATION DATA IN 3D LASER SCANNER SYSTEMS	2017-01-19		15/410612	
PUMP COMBINER FOR MULTI-CLAD FIBERS	2017-01-03	2018-01-16	15/397719	9871338
BLACK SUB-ANODIZED MARKING USING PICOSECOND BURSTS	2017-01-02		15/396738	
MULTIFUNCTIONAL CIRCUIT FOR MONITORING FIBER CABLE HEALTH	2016-12-31	2017-12-05	15/396593	9837791
FULLY CONTROLLABLE BURST SHAPING INDIVIDUAL PULSES FROM PICOSECOND FIBER LASERS	2016-12-28	2017-12-05	15/392925	9837784
FIBER PUMP COMBINER	2016-12-27	2018-01-09	15/391050	9865984
REVERSE INTERLEAVING FOR LASER LINE GENERATORS	2016-12-19	2019-11-05	15/384059	10466494

FLARED LASER OSCILLATOR WAVEGUIDE	2016-12-13	2018-07-03	15/377813	10014664
LASER MODULE WITH MENISCUS COLLIMATING LENS	2016-12-08	2018-07-24	15/373217	10033151
OPTICAL MODE FILTER EMPLOYING RADIALLY ASYMMETRIC FIBER	2016-11-28	2018-03-13	15/362705	9917410
PREDICTIVE MODIFICATION OF LASER DIODE DRIVE CURRENT WAVEFORM IN ORDER TO OPTIMIZE OPTICAL OUTPUT WAVEFORM IN HIGH POWER LASER SYSTEMS	2016-11-22	2018-09-11	15/359273	10074960
FINE-SCALE TEMPORAL CONTROL FOR LASER MATERIAL PROCESSING	2016-11-21	2019-10-08	15/357484	10434600
LASER FAULT TOLERANCE AND SELF-CALIBRATION SYSTEM	2016-11-18	2019-10-15	15/355996	10447004
RUST FREE STAINLESS STEEL ENGRAVING	2016-11-11		15/349174	
MULTIPLE LASER MODULE PROGRAMMING OVER INTERNAL COMMUNICATIONS BUS OF FIBER LASER	2016-11-09	2019-06-25	15/347569	10331431
FIBER LASER PACKAGING	2016-11-02	2018-01-09	15/341776	9865981
PROGRAMMABLE WAVEFORM SIMULATOR	2016-11-01		15/340705	
TAPERED CORE FIBER MANUFACTURING METHODS	2016-10-20	2017-11-14	15/299327	9815731
BEAM PARAMETER PRODUCT (BPP) CONTROL BY VARYING FIBER-TO-FIBER ANGLE	2016-09-26		15/276589	
HEAT SPREADER WITH OPTIMIZED COEFFICIENT OF THERMAL EXPANSION AND/OR HEAT TRANSFER	2016-08-16		15/238192	
FIBER WITH DEPRESSED CENTRAL INDEX FOR INCREASED BEAM PARAMETER PRODUCT	2016-07-08	2019-12-31	15/742770	10520671
ADAPTIVE BOOST CONTROL FOR GATING PICOSECOND PULSED FIBER LASERS	2016-06-29	2017-10-31	15/197443	9806488
ANGLED DBR-GRATING LASER/AMPLIFIER WITH ONE OR MORE MODE-HOPPING REGIONS	2016-06-06	2019-04-23	15/579109	10270224
PASSIVELY ALIGNED CROSSED-CYLINDER OBJECTIVE ASSEMBLY	2016-05-13		15/154663	
PORTABLE INDUSTRIAL FIBER OPTIC INSPECTION SCOPE	2016-04-29		15/143314	
ACTIVE MONITORING OF MULTI-LASER SYSTEMS	2016-03-24	2019-05-21	15/079664	10295405
FIBER SOURCE WITH CASCADED GAIN STAGES AND/OR MULTIMODE DELIVERY FIBER WITH LOW SPLICE LOSS	2016-03-18	2018-08-14	15/074838	10050404
LASER MARKING METHOD AND SYSTEM AND LASER MARKED OBJECT	2016-02-10		15/040357	
HIGH-POWER SINGLE-MODE FIBER SOURCES	2016-01-22	2017-12-05	15/004680	9837783
WAVELENGTH LOCKING MULTIMODE DIODE LASERS WITH FIBER BRAGG GRATING IN LARGE MODE AREA CORE	2015-12-31	2017-06-06	14/986545	9673591
HIGH BRIGHTNESS MULTIFUNCTION DIODE STACKING	2015-12-30	2017-07-11	14/984602	9705289
OPTICAL LOSS MANAGEMENT IN HIGH POWER DIODE LASER PACKAGES	2015-12-16	2018-12-18	14/971753	10158210
MULTI-BEAM LASER PROCESSING WITH DISPERSION COMPENSATION	2015-11-12	2019-09-10	14/939836	10406630
DIODE LASER PACKAGES WITH FLARED LASER OSCILLATOR WAVEGUIDES	2015-11-11	2017-04-18	14/938199	9627852
FIBER TERMINATION ASSEMBLY	2015-10-23		14/921203	
SLANTED FBG FOR SRS SUPPRESSION	2015-10-15	2017-04-25	14/884642	9634462
MULTIPLE FLARED LASER OSCILLATOR WAVEGUIDE	2015-10-09		14/879515	
CRYOGENIC COOLING OF DIODE LASER WITH COOLANT RECOVERY	2015-10-01	2018-05-08	14/873049	9966731

FLARED LASER OSCILLATOR WAVEGUIDE	2015-09-16	2017-01-24	14/855710	9553424
BACK-REFLECTION PROTECTION AND MONITORING IN FIBER AND FIBER-DELIVERED LASERS	2015-08-03	2019-06-04	14/816211	10310201
DISTRIBUTED LASER POWER ARCHITECTURE FOR LASER DIODE ARRAYS	2015-07-31	2017-05-30	14/815403	9667022
HIGH EFFICIENCY LOW COST LASER POWER SUPPLY	2015-07-02	2018-09-11	14/790737	10074954
MULTIMODE FIBER COMBINERS	2015-05-01	2017-01-03	14/702298	9535217
ALGORITHMS FOR RAPID GATING OF SEED SUSPENDABLE PULSED FIBER LASER AMPLIFIERS	2015-03-13	2018-10-09	14/657791	10096965
HIGH BRIGHTNESS MULTIUNCTION DIODE STACKING	2015-03-06	2017-08-01	14/641093	9720145
SQUARE PULSE LASER LIFT OFF	2015-02-26	2017-04-04	14/632813	9610651
SINGLE-EMITTER LINE BEAM SYSTEM	2015-02-04	2017-07-18	14/614194	9709810
RESONANT ACTIVE GRATING MIRROR FOR SURFACE EMITTING LASERS	2015-01-30	2016-06-21	14/611124	9373936
SPUN ROUND CORE FIBER	2015-01-29	2017-10-10	15/115392	9784913
MULTI-WAVELENGTH LASER DEVICE	2014-11-18	2016-02-23	14/547116	9270085
FIBER LASER LINE BEAM SYSTEM AND METHOD	2014-10-07		14/508684	
SCANNER DRIFT COMPENSATION FOR LASER MATERIAL PROCESSING	2014-08-01		14/450162	
HIGH POWER CHIRALLY COUPLED CORE OPTICAL AMPLIFICATION SYSTEMS AND METHODS	2014-07-11	2016-07-19	14/329484	9397466
OPTIMIZATION OF HIGH RESOLUTION DIGITALLY ENCODED LASER SCANNERS FOR FINE FEATURE MARKING	2014-07-03	2017-12-12	14/323954	9842665
LASER PATTERNING SKEW CORRECTION	2014-06-05		14/296722	
SCALABLE HIGH POWER FIBER LASER	2014-06-02	2018-09-04	14/293941	10069271
DIODE LASER PACKAGES WITH FLARED LASER OSCILLATOR WAVEGUIDES	2014-04-09	2015-12-15	14/249276	9214786
SPUN NON-CIRCULAR AND NON-ELLIPTICAL CORE OPTICAL FIBERS AND APPARATUSES UTILIZING THE SAME	2014-03-18	2015-12-22	14/218738	9217825
PATTERNING CONDUCTIVE FILMS USING VARIABLE FOCAL PLANE TO CONTROL FEATURE SIZE	2014-02-21	2019-11-05	14/768595	10464172
LASER PATTERNING OF MULTI-LAYER STRUCTURES	2014-02-21	2018-10-16	14/768613	10100393
FLEXIBLE IRRADIANCE IN LASER IMAGING	2013-12-31	2016-06-28	14/145778	9377566
SHORT PULSE FIBER LASER FOR LTFS CRYSTALLIZATION	2013-12-30	2019-10-22	14/144350	10453691
PULSED BIAS CURRENT FOR GAIN SWITCHED SEMICONDUCTOR LASERS FOR AMPLIFIED SPONTANEOUS EMISSION REDUCTION	2013-12-30	2017-12-26	14/144344	9853411
SPATIALLY STABLE HIGH BRIGHTNESS FIBER	2013-12-30	2016-11-01	14/144408	9484707
ALL FIBER LOW DYNAMIC POINTING HIGH POWER LMA FIBER AMPLIFIER	2013-12-30	2016-05-31	14/144396	9356418
NON-ABLATIVE LASER PATTERNING	2013-09-18	2017-01-03	14/030799	9537042
RESONATOR MOUNTING ASSEMBLY FOR ISOLATION OF RESONATOR DEFINING OPTICS	2013-09-12	2014-11-18	14/025671	8891580
FLARED LASER OSCILLATOR WAVEGUIDE	2013-08-27	2015-10-20	14/011661	9166369
IMAGE ROTATION COMPENSATION FOR MULTIPLE BEAM MATERIAL PROCESSING	2013-06-11		13/915509	
WAVELENGTH LOCKING MULTI-MODE DIODE LASERS WITH CORE FBG	2013-05-17	2016-11-15	13/897216	9496683

PULSED LINE BEAM DEVICE PROCESSING SYSTEMS USING LASER DIODES	2013-03-15	2016-08-09	13/840253	9413137
INJECTION LOCKING OF GAIN SWITCHED DIODES FOR SPECTRAL NARROWING AND JITTER STABILIZATION	2013-03-15	2016-02-16	13/835354	9263855
THERMAL PROCESSING WITH LINE BEAMS	2013-03-15	2019-03-12	13/837647	10226837
ACTIVE MONITORING OF MULTI-LASER SYSTEMS	2013-03-14	2016-04-12	13/828336	9310248
INTEGRATING VOLUME FOR LASER LIGHT HOMOGENIZATION	2013-03-12	2017-01-10	13/795195	9541679
LASER DRIVER SUBSYSTEM	2013-02-11	2015-03-15	13/764629	8995487
METHOD FOR ACTIVELY CONTROLLING THE OPTICAL OUTPUT OF A SEED LASER	2013-02-04	2016-10-25	13/758904	9478931
LASER DIODE APPARATUS UTILIZING OUT OF PLANE COMBINATION	2012-12-25	2016-09-27	13/726586	9455552
FIBER TERMINATION ASSEMBLY	2012-11-19	2015-11-24	13/680836	9195006
HIGH POWER SEMICONDUCTOR LASER WITH PHASE-MATCHING OPTICAL ELEMENT	2012-09-21	2015-10-20	13/624537	9166368
PYROMETER PROCESS TEMPERATURE MEASUREMENT FOR HIGH POWER LIGHT SOURCES	2012-08-27	2016-02-16	13/595935	9261406
HIGH POWER LASER IMAGING SYSTEMS	2012-07-02	2016-08-09	13/540461	9409255
UNSTABLE OPO RESONATORS WITH IMPROVED BEAM QUALITY	2012-06-25	2016-03-08	13/532681	9281652
TAPERED CORE FIBER MANUFACTURING METHODS	2012-06-12	2016-11-01	13/494768	9484706
HIGH POWER LASER IMAGING SYSTEMS	2012-06-01	2016-08-30	13/486896	9429742
HIGH POWER LASER SYSTEM	2012-03-27	2018-10-09	13/431857	10095016
UV-GREEN CONVERTING FIBER LASER USING ACTIVE TAPERS	2012-03-12	2016-03-15	13/418255	9285541
HYBRID LASER AMPLIFIER SYSTEM INCLUDING ACTIVE TAPER	2012-03-12	2014-10-28	13/418262	8873134
FREQUENCY LOCKED DIODE LASER DEVICES EXHIBITING LOW POWER PENALTY	2012-01-23	2016-05-03	13/355677	9331455
CLADDING MODE SPATIAL FILTER	2011-12-28	2016-11-15	13/339045	9494739
ACTIVE TAPERS WITH REDUCED NONLINEARITY	2011-12-28	2015-10-13	13/339037	9158070
LASER DEVICE	2011-12-19	2013-03-26	29/408905	D678788
LASER DIODE APPARATUS UTILIZING REFLECTING SLOW AXIS COLLIMATORS	2011-12-16	2014-11-18	13/328877	8891579
OPTICAL CONNECTOR AND OPTICAL CONNECTOR ASSEMBLY	2011-11-10	2014-09-16	13/293500	8834039
HOMOGENIZING OPTICAL FIBER APPARATUS AND SYSTEMS EMPLOYING THE SAME	2011-10-31	2014-09-09	13/285119	8831396
INTENSITY DISTRIBUTION MANAGEMENT SYSTEM AND METHOD IN PIXEL IMAGING	2011-09-30	2017-08-01	13/250686	9720244
LASER MARKING METHOD AND SYSTEM	2011-09-20	2016-03-22	13/236949	9290008
FIBER CLADDING LIGHT STRIPPER	2011-07-11	2013-09-17	13/179856	8537871
NANO THICK PT METALLIZATION LAYER	2011-02-09	2013-10-29	13/024219	8569889
BEAM HOMOGENIZER	2011-01-04	2014-09-16	12/984085	8835804
FIBER LASER SYSTEMS FOR COLD ABLATION	2010-11-09	2015-06-02	12/942888	9044829
HIGH POWER FIBER AMPLIFIER WITH STABLE OUTPUT	2010-04-09	2014-04-29	12/757737	8711471
MULTIMODE FIBER COMBINERS	2009-06-30	2015-06-23	12/495746	9063289
SINGLE MODE FIBER COMBINERS	2009-05-28	2016-11-15	12/474210	9494738
FIBER-COUPLED LASER DIODE ILLUMINATION SYSTEMS WITH STABLE BEAM PROPAGATION	2009-04-09	2013-07-09	12/421509	8483533

MODULAR DIODE LASER ASSEMBLY	2008-07-30	2010-12-07	12/221013	7848372
FIBER STRUCTURE AND A METHOD FOR DISCRIMINATING HIGH ORDER MODES IN THE FIBER STRUCTURE	2008-06-30	2015-01-13	12/164264	8934749
OPTICAL FIBER STRUCTURE AND A METHOD OF PRODUCING THEREOF	2008-03-17	2013-12-31	12/531373	8620126
LIGHT AMPLIFYING FIBER ARRANGEMENT	2007-08-31	2009-07-14	11/896373	7559706
MODULAR DIODE LASER ASSEMBLY	2006-03-17	2009-09-08	11/378697	7586963
MODULAR DIODE LASER ASSEMBLY	2006-03-17	2008-10-28	11/378667	7443895
MODULAR DIODE LASER ASSEMBLY	2006-03-17	2008-09-02	11/378696	7420996
OPTICAL FIBER FABRICATION	2006-02-22	2010-10-12	11/358112	7813608
OPTICAL FIBER PROCESSING METHOD	2006-02-22	2008-11-25	11/358111	7455464
DIODE LASER ELECTRICAL ISOLATION SYSTEM	2006-01-24	2010-02-16	11/338329	7664150
MODULAR DIODE LASER ASSEMBLY	2005-12-20	2008-10-14	11/313068	7436868
DIODE LASER ARRAY COUPLING OPTIC AND SYSTEM	2005-10-18	2008-10-28	11/252778	7444046
METHOD FOR FEEDING LIQUID TO A FLAME SPRAYING APPARATUS	2004-02-11	2010-02-16	10/544933	7662439
METHOD AND DEVICE FOR SPECTRAL FILTERING	2003-09-04	2007-05-15	10/526667	7218823
METHOD FOR THE PREPARATION OF DOPED OXIDE MATERIAL	2003-06-27	2009-12-01	10/518006	7624596
SYSTEM AND METHOD OF OPERATING LOW COUPLING EFFICIENCY OPTICAL SOURCE BY DISSIPATING CLADDING MODES	2002-10-23	2005-03-08	10/278641	6865316
BROAD SPECTRUM EMITTER ARRAY AND METHODS FOR FABRICATION THEREOF	2002-03-06	2003-12-16	10/092018	6663785
DYNAMICALLY SPECTRALLY TAILORED RAMAN PUMP LASER	2001-08-31	2005-06-14	09/945370	6907051
SPECTRALLY TAILORED RAMAN PUMP LASER	2001-08-31	2004-12-28	09/945381	6836487
SYSTEM AND METHOD FOR PROVIDING A CONTROLLED LINEWIDTH EXTERNAL CAVITY LASER	2001-08-31	2003-12-02	09/945324	6657775
SYSTEM AND METHOD FOR OPTIMIZING THE PERFORMANCE OF MULTIPLE GAIN ELEMENT LASER	2001-08-13	2003-12-16	09/929837	6665471

EXHIBIT C

TRADEMARKS

TITLE AND DESCRIPTION	DATE OF APPLICATION	DATE OF REGISTRATION	TRADEMARK NO.	REGISTRATION NO.
ELEMENT	2/3/2013	3/4/2014	85841533	4492393
SIMPLY BRILLIANT	2/5/2013	4/15/2014	85841528	4515996
NLIGHT PHOTONICS	1/13/2011	8/23/2011	85216972	4015450
NLIGHT	1/13/2011	8/23/2011	85216920	4015448
3C	9/7/2010	8/30/2011	85123985	4018346
CORONA	1/15/2018		87755545	
FLUENCE-ON-THE-FLY	2/4/2019		88288773	
CIRRUS	1/22/2019		88271786	

EXHIBIT D

MASK WORKS

DESCRIPTION	REGISTRATION/ APPLICATION NUMBER	REGISTRATION/ APPLICATION DATE
None.		