504626022 11/03/2017

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4672740

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PARVIZ TAYEBATI	04/03/2015
BIEN CHANN	04/03/2015

RECEIVING PARTY DATA

Name:	TERADIODE, INC.
Street Address:	30 UPTON DRIVE
City:	WILMINGTON
State/Country:	MASSACHUSETTS
Postal Code:	01887

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15802645

CORRESPONDENCE DATA

Fax Number: (202)739-3001

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.

617-951-8293 Phone:

Email: patents@morganlewis.com, debra.gilbride@morganlewis.com

Correspondent Name: MATTHEW T. CURRIE

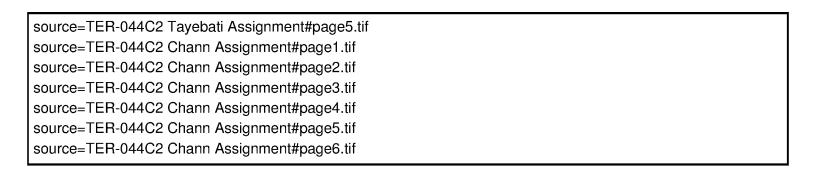
Address Line 1: MORGAN, LEWIS, & BOCKIUS LLP (BO)

Address Line 2: 1111 PENNSYLVANIA AVENUE Address Line 4: WASHINGTON, D.C. 20004-2541

ATTORNEY DOCKET NUMBER:	TER-044C2
NAME OF SUBMITTER:	MATTHEW T. CURRIE
SIGNATURE:	/Matthew T. Currie/
DATE SIGNED:	11/03/2017

Total Attachments: 11

source=TER-044C2 Tayebati Assignment#page1.tif source=TER-044C2 Tayebati Assignment#page2.tif source=TER-044C2 Tayebati Assignment#page3.tif source=TER-044C2 Tayebati Assignment#page4.tif



PATENT APPLICATION Assignment

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned, inventor:

PARVIZ TAYEBATI

Who has created certain inventions for which applications for United States Letters Patents, set forth on Exhibit A attached hereto, were filed at the U.S. Patent and Trademark Office; and

Do hereby sell, assign and transfer, and do hereby confirm any previous sale, assignment and transfer, to TeraDiode, Inc., a corporation having a place of business at 30 Upton Drive, Wilmington, MA 01887, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possession and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, act, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Agree that **TeraDiode**, **Inc.**, hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, successors, assigns, or legal representatives; and

Covenant with said Assignee, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same has herein expressed is possessed by the undersigned.

IN THE TESTIMONY WHEREOF I have hereunto set my signature on the date indicated below.

	7 <u>2-7</u> 2-10-
	PÄRVIZ TAYEBATI
Date: 4/3/2015	w [*]
United States of America)
State of MGSCULLSCHS) ss.:
County of Maddle State	
On this 3 day of A party personally came PARVIZ TAY	, before me
* ************************************	
described in and who executed the foregoing of the same.	s instrument, and acknowledged execution
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	DESIGNATION OF A STATE OF THE PROPERTY OF THE

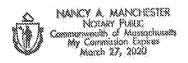


Exhibit A

Application No.	Title	Filing Date
61/583,156	COMPACT, ULTRA-NARROW- BANDWIDTH, HIGH-POWER DIODE LASER PUMPS FOR DIODE-PUMPED ALKALI LASERS	01/04/2012
61/601,763	HIGH BRIGHTNESS WAVELENGTH BEAM COMBINED LASER SYSTEM	02/22/2012
61/598,470	2-D WDM COMBINER	02/14/2012
61/611,670	HIGH BRIGHTNESS, MONOLITHIC, MULTISPECTRAL SEMICONDUCTOR LASER	03/16/2012
61/809,360	HIGH BRIGHTNESS, MONOLITHIC, MULTISPECTRAL SEMICONDUCTOR LASER	04/06/2013
13/686,974	MULTI-WAVELENGTH BEAM COMBINING SYSTEM AND METHOD	11/28/2012
13/841,821	OPTICAL CROSS-COUPLING MITIGATION SYSTEM FOR MULTI- WAVELENGTH BEAM COMBINING SYSTEMS	03/15/2013
13/766,923	TWO-DIMENSIONAL MULTI-BEAM STABILIZER AND COMBINING SYSTEMS AND METHODS	02/14/2013
61/819,461	HIGH POWER OPTICAL ANTI- REFLECTION (AR) FIBER CABLES	05/03/2013
61/916,598	METHOD FOR BINNING DIODE BARS HAVING MULTIPLE EMITTERS	12/16/2013
13/927,093	SYSTEM AND METHOD FOR WAVELENGTH BEAM COMBINATION ON A SINGLE LASER EMITTER	06/25/2013
61/944,989	SYSTEM AND METHOD FOR VARYING BPP FOR BEAM COMBINING	02/26/2014
61/948,205	SYSTEM AND METHOD FOR IMPROVING LASER CUTTING AND WELDING	03/05/2014
61/949,226	M2 VALUE IN WAVELENGTH BEAM COMBINING SYSTEMS AND METHODS	03/06/2014
61/972,303	HEAT TRANSFER AND ELECTRICAL ISOLATION DESIGN FOR USE WITH HIGH-POWER DIODE EMITTERS	03/29/2014

62/011,958	HEAT TRANSFER AND ELECTRICAL ISOLATION DESIGN FOR USE WITH HIGH-POWER DIODE EMITTERS	06/13/2014
61/972,305	MULTI-WAVELENGTH BEAM COMBINING SYSTEM AND METHOD UTILIZING MICRO-OPTICS	03/29/2014
61/973,353	SYSTEMS AND METHODS FOR IMPROVED REAL TIME DEPTH MEASUREMENT USING MULTI- WAVELENGTH OUTPUT BEAMS	04/01/2014
14/247,233	HIGH BRIGHTNESS, MONOLITHIC, MULTISPECTRAL SEMICONDUCTOR LASER	04/07/2014
61/977,360	HIGH POWER, HIGH BRIGHTNESS INTEGRATED WAVELENGTH BEAM COMBINER	04/09/2014
14/270,327	HIGH POWER OPTICAL FIBER ENDS	05/05/2014
61/986,237	SYSTEM AND METHOD FOR VARYING BPP FOR BEAM COMBINING	04/30/2014
62/011,909	OPTICAL SYSTEM ALIGNMENT AND METHODS TO PRODUCE A MORE POSITIONED/ALIGNED COMBINED BEAM OUTPUT PROFILE IN A WAVELENGTH BEAM COMBINING (WBC) SYSTEM	06/13/2014
62/028,149	OPTICAL SYSTEM ALIGNMENT AND METHODS TO PRODUCE A MORE POSITIONED/ALIGNED COMBINED BEAM OUTPUT PROFILE IN A WAVELENGTH BEAM COMBINING (WBC) SYSTEM	07/23/2014
62/016,779	SYSTEM AND METHOD FOR VARYING BPP FOR BEAM COMBINING USING ACOUSTO OPTICAL ELEMENTS	06/25/2014
62/083,724	SYSTEM AND METHOD FOR VARYING BPP FOR BEAM COMBINING USING ACOUSTO OPTICAL ELEMENTS	11/24/2014
62/033,981	SPLATTER SHIELD SYSTEM AND METHOD FOR LASER MANUFACTURING	08/06/2014
62/051,681	SYSTEM AND METHOD FOR ADJUSTING BPP POST LASER SYSTEM USING THERMALLY DEFORMABLE OPTICS	09/17/2014

62/083,582	SYSTEM AND METHOD FOR ADJUSTING BPP POST LASER SYSTEM USING THERMALLY DEFORMABLE OPTICS	11/24/2014
62/051,523	FIBER BASED OUTPUT COUPLER METHOD FOR SCALABLE WAVELENGTH BEAM COMBINING LASER SYSTEM	09/17/2014
14/572,769	METHOD FOR IMPROVING PERFORMANCE OF WAVELENGTH BEAM COMBINING DIODE LASER SYSTEMS	12/16/2014
14/572,770	METHOD FOR IMPROVING PERFORMANCE OF WAVELENGTH BEAM COMBINING DIODE LASER SYSTEMS	12/17/2014
62/108,250	HEAT TRANSFER AND ELECTRICAL ISOLATION DESIGN FOR USE WITH HIGH-POWER DIODE EMITTERS	01/27/2015
62/108,278	HEAT TRANSFER AND ELECTRICAL ISOLATION DESIGN FOR USE WITH HIGH-POWER DIODE EMITTERS	01/27/2015

PATENT APPLICATION Assignment

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned, inventor:

BIEN CHANN

Who has created certain inventions for which applications for United States Letters Patents, set forth on Exhibit A attached hereto, were filed at the U.S. Patent and Trademark Office; and

Do hereby sell, assign and transfer, and do hereby confirm any previous sale, assignment and transfer, to **TeraDiode**, **Inc.**, a corporation having a place of business at 30 Upton Drive, Wilmington, MA 01887, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possession and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, act, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Agree that **TeraDiode**, **Inc.**, hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, successors, assigns, or legal representatives; and

Covenant with said Assignee, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same has herein expressed is possessed by the undersigned.

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IN THE TESTIMONY WHEREOF I have hereunto set my signature on the date indicated below.

	1912 - 05 Dy the Class
	/ BIEN CHÂNN
Date: 4/3/2015	
United States of America)	
State of YUSUCHUSEAS) ss	o K
County of MICAUSEY)	
On this 3 day of Docide personally came BIEN CHANN	, to me known to be the individual
described in and who executed the foregoing instrof the same.	
	Janey Public Marchesta

NANCY A MANCHESTER
NOTAM PIERE
Commission Disperse
March 27, 2020

Exhibit A

Application No.	Title	Filing Date
61/310,777	LASER DIODE INNOVATIONS	03/05/2010
61/310,781	LASER DIODE INNOVATIONS	03/05/2010
61/376,900	LASER DIODE INNOVATIONS	08/25/2010
13/218,251	KILOWATT-CLASS DIODE LASER SYSTEM	08/25/2011
13/218,327	WAVELENGTH BEAM COMBINING LASER WITH MULTIPLE OUTPUTS	08/25/2011
61/408,645	MINI WBC FIBER-COUPLED DIRECT DIODE LASERS	10/31/2010
13/041,035	WAVELENGTH BEAM COMBINING BASED PULSED LASERS	03/04/2011
13/041,070	WAVELENGTH BEAM COMBINING BASED PULSED LASERS	03/04/2011
13/042,042	SELECTIVE REPOSITIONING AND ROTATION WAVELENGTH BEAM COMBINING SYSTEM AND METHOD	03/07/2011
13/042,243	SCALABLE WAVELENGTH BEAM COMBINING SYSTEM AND METHOD	03/07/2011
14/053,529	SCALABLE WAVELENGTH BEAM COMBINING SYSTEM AND METHOD	10/14/2013
14/445,339	SCALABLE WAVELENGTH BEAM COMBINING SYSTEM AND METHOD	07/29/2014
61/452,070	WAVELENGTH BEAM COMBINING USING SPECTRALLY BROAD (>100 GHZ LINE-WIDTH) FIBER AMPLIFIERS	03/11/2011
61/532,728	MULTI-WAVELENGTH-BAND DIODE LASER	09/09/2011
13/286,027	COMPACT INTERDEPENDENT OPTICAL ELEMENT WAVELENGTH BEAM COMBINING LASER SYSTEM AND METHOD	10/31/2011
61/538,092	MULTI-WAVELENGTH-BAND DIODE LASER BASED ON WAVELENGTH BEAM COMBINATION	09/22/2011

13/304,300	COMPACT, ULTRA-NARROW LINEWIDTH, HIGH-POWER DIODE LASER SYSTEM AND METHOD FOR USE WITH DIODE-PUMPED ALKALI LASERS	11/23/2011
13/337,023	HIGH POWER LASER SYSTEM WITH SPECKLE REDUCTION	12/23/2011
13/332,326	MULTI-BAND CO-BORE-SIGHTED SCALABLE OUTPUT POWER LASER SYSTEM	12/20/2011
61/583,156	COMPACT, ULTRA-NARROW- BANDWIDTH, HIGH-POWER DIODE LASER PUMPS FOR DIODE-PUMPED ALKALI LASERS	01/04/2012
61/601,763	HIGH BRIGHTNESS WAVELENGTH BEAM COMBINED LASER SYSTEM	02/22/2012
61/598,470	2-D WDM COMBINER	02/14/2012
61/611,670	HIGH BRIGHTNESS, MONOLITHIC, MULTISPECTRAL SEMICONDUCTOR LASER	03/16/2012
61/809,360	HIGH BRIGHTNESS, MONOLITHIC, MULTISPECTRAL SEMICONDUCTOR LASER	04/06/2013
13/686,974	MULTI-WAVELENGTH BEAM COMBINING SYSTEM AND METHOD	11/28/2012
13/841,821	OPTICAL CROSS-COUPLING MITIGATION SYSTEM FOR MULTI- WAVELENGTH BEAM COMBINING SYSTEMS	03/15/2013
61/661,836	WIDELY TUNABLE IR SOURCE	06/20/2012
61/663,735	ULTRA-HIGH BRIGHTNESS, SPECTRALLY-NARROW, WAVELENGTH- BEAM-COMBINED DIODE LASER PUMPS FOR HIGH-POWER FIBER AMPLIFIERS	06/25/2012
61/730,544	RETRO-REFLECTOR PRISM WBC RESONATOR	11/28/2012
13/766,923	TWO-DIMENSIONAL MULTI-BEAM STABILIZER AND COMBINING SYSTEMS AND METHODS	02/14/2013
61/819,461	HIGH POWER OPTICAL ANTI- REFLECTION (AR) FIBER CABLES	05/03/2013
61/916,598	METHOD FOR BINNING DIODE BARS HAVING MULTIPLE EMITTERS	12/16/2013

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13/923,344	TWO-DIMENSIONAL MULTI-BEAM STABILIZER AND COMBINING SYSTEMS AND METHODS	6/20/2013
13/927,093	SYSTEM AND METHOD FOR WAVELENGTH BEAM COMBINATION ON A SINGLE LASER EMITTER	06/25/2013
14/093,409	STABILIZATION OF HIGH-POWER WBC SYSTEMS	11/29/2013
14/093,407	STABILIZATION OF HIGH-POWER WBC SYSTEMS	11/29/2013
61/944,989	SYSTEM AND METHOD FOR VARYING BPP FOR BEAM COMBINING	02/26/2014
61/948,205	SYSTEM AND METHOD FOR IMPROVING LASER CUTTING AND WELDING	03/05/2014
61/949,226	M2 VALUE IN WAVELENGTH BEAM COMBINING SYSTEMS AND METHODS	03/06/2014
61/972,303	HEAT TRANSFER AND ELECTRICAL ISOLATION DESIGN FOR USE WITH HIGH-POWER DIODE EMITTERS	03/29/2014
62/011,958	HEAT TRANSFER AND ELECTRICAL ISOLATION DESIGN FOR USE WITH HIGH-POWER DIODE EMITTERS	06/13/2014
61/972,305	MULTI-WAVELENGTH BEAM COMBINING SYSTEM AND METHOD UTILIZING MICRO-OPTICS	03/29/2014
14/247,233	HIGH BRIGHTNESS, MONOLITHIC, MULTISPECTRAL SEMICONDUCTOR LASER	04/07/2014
61/977,360	HIGH POWER, HIGH BRIGHTNESS INTEGRATED WAVELENGTH BEAM COMBINER	04/09/2014
14/270,327	HIGH POWER OPTICAL FIBER ENDS	05/05/2014
61/986,237	SYSTEM AND METHOD FOR VARYING BPP FOR BEAM COMBINING	04/30/2014
62/012,322	STABILIZATION ALONG THE SLOW AXIS OF A MULTI-WAVELENGTH BEAM COMBINING SYSTEM AND METHOD	06/14/2014
62/012,336	WAVELENGTH BEAM COMBINING SYSTEMS AND METHODS UTILIZING VARIOUS MICRO-OPTICAL ELEMENTS	06/14/2014

62/012,335	USING FAC AND OPTICAL ROTATION SYSTEM TO ACHIEVE CHIEF RAY FOCUS IN A WAVELENGTH BEAM COMBINING SYSTEM AND METHOD	06/14/2014
62/016,779	SYSTEM AND METHOD FOR VARYING BPP FOR BEAM COMBINING USING ACOUSTO OPTICAL ELEMENTS	06/25/2014
62/083,724	SYSTEM AND METHOD FOR VARYING BPP FOR BEAM COMBINING USING ACOUSTO OPTICAL ELEMENTS	11/24/2014
62/051,681	SYSTEM AND METHOD FOR ADJUSTING BPP POST LASER SYSTEM USING THERMALLY DEFORMABLE OPTICS	09/17/2014
62/083,582	SYSTEM AND METHOD FOR ADJUSTING BPP POST LASER SYSTEM USING THERMALLY DEFORMABLE OPTICS	11/24/2014
62/083,230	WAVELENGTH BEAM COMBINING USING VIRTUALLY IMAGED PHASED ARRAY	11/23/2014
62/083,229	WAVELENGTH BEAM COMBINING USING PLANO-CURVED ETALON	11/22/2014
62/089,839	OPTICAL CROSS-COUPLING MITIGATION SYSTEM FOR MULTI- WAVELENGTH BEAM COMBINING SYSTEMS	12/10/2014
14/572,769	METHOD FOR IMPROVING PERFORMANCE OF WAVELENGTH BEAM COMBINING DIODE LASER SYSTEMS	12/16/2014
14/572,770	METHOD FOR IMPROVING PERFORMANCE OF WAVELENGTH BEAM COMBINING DIODE LASER SYSTEMS	12/17/2014
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