505098834 09/18/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT	
CONVEYING PARTY	Υ DATA			
		Name	Execution Date	
ANDREAS LOEFFLE	R		09/07/2018	
CLEMENS VIERHEILIG			08/29/2018	
SVEN GERHARD			08/29/2018	
RECEIVING PARTY	DATA			
Name:	OSRAM OPTO SEMICONDUCTORS GMBH		ЗН	
Street Address:	LEIBNI	LEIBNIZSTR. 4		
City:	REGEN	REGENSBURG		
State/Country:	GERMA	GERMANY		
Postal Code:	93055			
PROPERTY NUMBE	RS Total: 1			
Property Type		Number		
Application Number	r:	16079678		
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CORRESPONDENC	E DATA	(215)656-3301	unsuccessful it will be sent	
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CORRESPONDENC Fax Number: <i>Correspondence wi</i> <i>using a fax number,</i> Phone:	E DATA II be sent to , if provided	(215)656-3301 • the e-mail address first; if that is 1; if that is unsuccessful, it will be 215-656-3381		
<i>using a fax number,</i> Phone: Email:	E DATA II be sent to , if provided	(215)656-3301 • the e-mail address first; if that is 1; if that is unsuccessful, it will be 215-656-3381 pto.phil@dlapiper.com		
CORRESPONDENC Fax Number: <i>Correspondence wi</i> <i>using a fax number,</i> Phone: Email: Correspondent Nam	E DATA II be sent to , if provided ne:	(215)656-3301 • the e-mail address first; if that is I; if that is unsuccessful, it will be 215-656-3381 pto.phil@dlapiper.com T. DANIEL CHRISTENBURY		
CORRESPONDENC Fax Number: <i>Correspondence wi using a fax number,</i> Phone: Email: Correspondent Nam Address Line 1:	E DATA II be sent to , if provided ne:	(215)656-3301 the e-mail address first; if that is if that is unsuccessful, it will be 215-656-3381 pto.phil@dlapiper.com T. DANIEL CHRISTENBURY ONE LIBERTY PLACE	e sent via US Mail.	
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CORRESPONDENC Fax Number: Correspondence wi using a fax number, Phone: Email: Correspondent Nam Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET NAME OF SUBMITTE BIGNATURE: DATE SIGNED: Total Attachments: 6	E DATA II be sent to if provided ne: NUMBER: R: assingment	(215)656-3301 o the e-mail address first; if that is l; if that is unsuccessful, it will be 215-656-3381 pto.phil@dlapiper.com T. DANIEL CHRISTENBURY ONE LIBERTY PLACE 1650 MARKET STREET, SUITE 49 PHILADELPHIA, PENNSYLVANIA WAB-18-1480 CAROL CONEY /cc/ 09/18/2018 #page1.tif	9 sent via US Mail. 1000	

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Docket No.: WAB-18-1480 Page 1 of 3

ASSIGNMENT

For good and valuable consideration, I (We),

Dr. Andreas <u>Loeffler</u>, residing at Breslauerstr. 39 93073 Neutraubling Germany Citizen of Germany

Dr. Clemens <u>Vierheilig</u>, residing at Lutherstr. 19 93105 Tegernheim Germany Citizen of Germany

Dr. Sven <u>Gerhard</u>, residing at Bischof-Ketteler-Str. 36 93087 Alteglofsheim Germany Citizen of Germany

hereafter individually or collectively referred to as "Assignor(s)";

Hereby, (I) acknowledge having previously assigned, sold and transferred to OSRAM Opto Semiconductors GmbH, a corporation organized and existing under the laws of GERMANY, having its principal place of business at Leibnizstraße 4 in 93055 Regensburg, hereinafter "Assignee", its successors, assigns and legal representatives, or to a predecessor of Assignee, pursuant to (A)(i) the laws of GERMANY or (ii) a Patent & Secrecy Agreement or similar legal document such as, without limitation, an employee agreement executed at the time of entering into the employment of, or executed as a condition of continuing employment with, the Assignee or a predecessor of the Assignee, the entire right, including any and all priority rights, title and interest, in and for the United States and all foreign countries, in and to any and all inventions or improvements which are disclosed in an invention disclosure and/or in the below-identified documents currently filed with this Assignment, already filed or granted for Letters Patent (in which case, any provision of the subject Assignment that is in conflict with or is in addition to any provision in the prior agreement(s) or assignment(s) then this Assignment shall govern, take precedence, and be of legal effect), or

(B)(i) to the extent such laws of GERMANY or such Patent & Secrecy Agreement or similar legal document failed or fails, in whole or part, to have assigned, sold or transferred the entire right (including priority rights), title and interest, in and for the United States and all foreign countries, in and to all inventions or improvements which are disclosed in the below-identified application(s) or pending application(s) or granted Letters Patent, or (ii) if no such agreement(s) exist assigning, selling or transferring any such right (including priority rights), title or interest; then for good and valuable consideration, Assignor(s) now and hereby, effective Nunc Pro Tunc on the filing date of the below identified patent application(s) or granted Letter Patent(s), assign, sell and transfer(s) to

Docket No.: WAB-18-1480 Page 2 of 3

Assignee, its successors, assigns and legal representatives, the entire right, (including all priority rights), title and interest in and for the United States and all foreign countries, in and to any and all inventions and/or improvements which are disclosed in the following identified; patent application(s), pending patent application(s) or granted Letter Patent(s)

Patent Application Title: Laser Bars Having Trenches Filing Date: 08/24/18 Filing Number: 16/079,678 Internal Case Number(s): WAB-18-1480

and in and to said application(s) or granted patents and all applications claiming priority to said application or granted patent, including, without limitation, and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of the inventions and/or improvements; and in and to all original and reissued patents which have been or shall be filed in the United States and all foreign countries on the inventions and/or improvements;

(II) Agree that said Assignee may apply for and receive Letters Patent for said inventions and/or improvements in its own name; and that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said inventions and/or improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and legal representatives, all facts known to the undersigned relating to said inventions and/or improvements 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 and maintaining proper patent protection for said inventions and/or improvements and all patents on said inventions and/or improvements, in said Assignee, its successors, assigns and legal representatives, and all applications for patents and all patents on said inventions and/or improvements, in said Assignee, its successors, assigns and legal representatives; and

(III) Covenant with said Assignee, its successors, assigns and 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 as herein expressed is possessed by the undersigned.

Witness Signature

Dr. Andreas Loeffler

printed name of witness

Date

Docket No.: WAB-18-1480 Page 3 of 3

Witness Signature

NDER SCHLEHAHN 1

printed name of witness

Dr. Clemens Vierheilig

29.08.2018

Date

Witness Signature

ANDRE SOTTERS printed name of witness

Dr. Sven Gerhard

29.08.18

Date

Companies Representative(s) OSRAM Opto Semiconductors GmbH

Signature

Name

Date

Signature Name

Date

έ.,

Docket No.: WAB-18-1480 Page 1 of 3

ASSIGNMENT

For good and valuable consideration, I (We),

Dr. Andreas <u>Loeffler</u>, residing at Breslauerstr. 39 93073 Neutraubling Germany Citizen of Germany

Dr. Clemens <u>Vierheilig</u>, residing at Lutherstr. 19 93105 Tegernheim Germany Citizen of Germany

Dr. Sven <u>Gerhard</u>, residing at Bischof-Ketteler-Str. 36 93087 Alteglofsheim Germany Citizen of Germany

hereafter individually or collectively referred to as "Assignor(s)";

Hereby, (I) acknowledge having previously assigned, sold and transferred to OSRAM Opto Semiconductors GmbH, a corporation organized and existing under the laws of GERMANY, having its principal place of business at Leibnizstraße 4 in 93055 Regensburg, hereinafter "Assignee", its successors, assigns and legal representatives, or to a predecessor of Assignee, pursuant to (A)(i) the laws of GERMANY or (ii) a Patent & Secrecy Agreement or similar legal document such as, without limitation, an employee agreement executed at the time of entering into the employment of, or executed as a condition of continuing employment with, the Assignee or a predecessor of the Assignee, the entire right, including any and all priority rights, title and interest, in and for the United States and all foreign countries, in and to any and all inventions or improvements which are disclosed in an invention disclosure and/or in the below-identified documents currently filed with this Assignment, already filed or granted for Letters Patent (in which case, any provision of the subject Assignment that is in conflict with or is in addition to any provision in the prior agreement(s) or assignment(s) then this Assignment shall govern, take precedence, and be of legal effect), or

(B)(i) to the extent such laws of GERMANY or such Patent & Secrecy Agreement or similar legal document failed or fails, in whole or part, to have assigned, sold or transferred the entire right (including priority rights), title and interest, in and for the United States and all foreign countries, in and to all inventions or improvements which are disclosed in the below-identified application(s) or pending application(s) or granted Letters Patent, or (ii) if no such agreement(s) exist assigning, selling or transferring any such right (including priority rights), title or interest; then for good and valuable consideration, Assignor(s) now and hereby, effective Nunc Pro Tunc on the filing date of the below identified patent application(s), pending patent application(s) or granted Letter Patent(s), assign, sell and transfer(s) to

PATENT REEL: 046897 FRAME: 0536

Docket No.: WAB-18-1480 Page 2 of 3

Assignee, its successors, assigns and legal representatives, the entire right, (including all priority rights), title and interest in and for the United States and all foreign countries, in and to any and all inventions and/or improvements which are disclosed in the following identified; patent application(s), pending patent application(s) or granted Letter Patent(s)

Patent Application Title: Laser Bars Having Trenches Filing Date: 08/24/18 Filing Number: 16/079,678 Internal Case Number(s): WAB-18-1480

and in and to said application(s) or granted patents and all applications claiming priority to said application or granted patent, including, without limitation, and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of the inventions and/or improvements; and in and to all original and reissued patents which have been or shall be filed in the United States and all foreign countries on the inventions and/or improvements;

(II) Agree that said Assignee may apply for and receive Letters Patent for said inventions and/or improvements in its own name; and that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said inventions and/or improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and legal representatives, all facts known to the undersigned relating to said inventions and/or improvements 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 and maintaining proper patent protection for said inventions and/or improvements and for vesting title to said inventions and/or improvements and all patents on said inventions and/or improvements, in said applications for patents and all patents on said inventions and/or improvements, in said Assignee, its successors, assigns and legal representatives; and

(III) Covenant with said Assignee, its successors, assigns and 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 as herein expressed is possessed by the undersigned.

Witness Signature

printed name of witness

Jenser DLP

PATENT REEL: 046897 FRAME: 0537

Docket No.: WAB-18-1480 Page 3 of 3

Witness Signature

printed name of witness

Dr. Clemens Vierheilig

Date

Witness Signature

Dr. Sven Gerhard

printed name of witness

Date

Companies Representative(s) OSRAM Opto Semiconductors GmbH

Signature

Name

Date

Signature

Name

Date

PATENT REEL: 046897 FRAME: 0538

RECORDED: 09/18/2018