

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
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EPAS ID: PAT6028433

<b>SUBMISSION TYPE:</b>	RESUBMISSION
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>RESUBMIT DOCUMENT ID:</b>	505846389
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHRISTOPHER M. GALBRAITH	07/25/2019
JORDAN A. KANKO	07/25/2019
PAUL J.L. WEBSTER	07/25/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	IPG PHOTONICS CORPORATION
<b>Street Address:</b>	50 OLD WEBSTER ROAD
<b>City:</b>	OXFORD
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	01540
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16515892
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(603)668-2970
<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>	603-668-6560
<b>Email:</b>	jhobbs@gtpp.com
<b>Correspondent Name:</b>	GROSSMAN, TUCKER, PERREAULT & PFLEGER, P
<b>Address Line 1:</b>	55 SOUTH COMMERCIAL STREET
<b>Address Line 4:</b>	MANCHESTER, NEW HAMPSHIRE 03101
<b>ATTORNEY DOCKET NUMBER:</b>	IPGP028
<b>NAME OF SUBMITTER:</b>	KEVIN J. CARROLL
<b>SIGNATURE:</b>	/KEVIN J. CARROLL/
<b>DATE SIGNED:</b>	03/24/2020
<b>Total Attachments: 8</b>	
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## **ASSIGNMENT OF THE UNITED STATES PATENT APPLICATION**

WHEREAS, I/WE, **Christopher M. Galbraith, Jordan A. Kanko and Paul J.L. Webster**, made certain new and useful inventions and improvements for which I/We filed, or will be filing, an application for Letters Patent of the United States, identified as U.S. patent application serial number **62/700,606** filed **July 19, 2018** entitled **“Wobble-Welding of Copper and Aluminum Alloys with Inline Coherent Imaging”** and U.S. patent application serial number **62/853,368** filed on **May 28, 2019** entitled **“Systems and Methods for Monitoring and/or Controlling Wobble-Welding Using Inline Coherent Imaging (ICI).”**

AND, WHEREAS, **IPG Photonics Corporation**, a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at **50 Old Webster Road, Oxford, MA 01540**, (hereinafter “Assignee”), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and applications and in and to the Letters Patent to be obtained therefore;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, I/We have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid applications, and in and to the said applications, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed under the Patent Cooperation Treaty, in any regional patent offices and in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and I/We do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee

as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, I/We do hereby agree that I/We and my/our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to me/us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be;

AND, furthermore, I/We covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me/us.

AND, as a named inventor, I hereby declare that:

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application, including the claims, and I am aware of the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 C.F.R. § 1.56.

I hereby acknowledge that any wilful false statement made in this declaration is punishable under 18 U.S. C. 1001 by fine or imprisonment of not more than five (5) years, or both.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 17th day of July, 2019.



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**Christopher M. Galbraith**

IN TESTIMONY WHEREOF, I have hereunto set my hand this 17 day of July, 2019.



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**Jordan A. Kanko**

IN TESTIMONY WHEREOF, I have hereunto set my hand this 17th day of July, 2019.



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**Paul J.L. Webster**



**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

March 03, 2020

PTAS

GROSSMAN, TUCKER, PERREAULT & PFLEGER,  
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55 SOUTH COMMERCIAL STREET  
MANCHESTER, NH 03101



505846389

United States Patent and Trademark Office  
Notice of Non-Recordation of an Assignment Document

The enclosed document has been examined and found non-recordable by the Assignment Recordation Branch of the U.S. Patent and Trademark Office. The reason(s) for non-recordation are stated below:

1. The document submitted is not legible for recording purposes.

Documents being resubmitted for recordation must reflect the corrected information to be recorded, the Document ID number referenced above and all pages from this submitted document. The original date of filing of this assignment document will be maintained if resubmitted with the appropriate correction(s) by **Monday, May 4, 2020**, as outlined under 37 CFR 3.51. The resubmitted document must include a stamp with the official date of receipt under 37 CFR 3. Applicants may use the certified procedures under 37 CFR 1.8 or 1.10 for resubmission of the returned papers if they desire to have the benefit of the date of deposit in the United States Postal Service.

To file the resubmission electronically, navigate to the EPAS website at <http://epas.uspto.gov>, click the Start Resubmission button and enter the following information:

**Document ID: 505846389**

**Access Code: 08CWUKI5PGN545U**

To file the resubmission in paper, send documents to: U.S. Patent and Trademark Office, Mail Stop: Assignment Recordation Branch, P.O. BOX 1450, Alexandria, VA 22313. If you have any questions regarding this notice, you may contact the Assignment Recordation Branch at 571-272-3350.

STEFANIE BRYCE  
ASSIGNMENT RECORDATION BRANCH  
PUBLIC RECORDS DIVISION

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5893325

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHRISTOPHER M. GALBRAITH	07/25/2019
JORDAN A. KANKO	07/25/2019
PAUL J.L. WEBSTER	07/25/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	IPG PHOTONICS CORPORATION
<b>Street Address:</b>	50 OLD WEBSTER ROAD
<b>City:</b>	OXFORD
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	01540
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<b>Property Type</b>	<b>Number</b>
Application Number:	16515892
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(603)668-2970
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<b>Phone:</b>	603-668-6560
<b>Email:</b>	jhobbs@gtpp.com
<b>Correspondent Name:</b>	GROSSMAN, TUCKER, PERREAULT & PFLEGER, P
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<b>Address Line 4:</b>	MANCHESTER, NEW HAMPSHIRE 03101
<b>ATTORNEY DOCKET NUMBER:</b>	IPGP028
<b>NAME OF SUBMITTER:</b>	KEVIN J. CARROLL
<b>SIGNATURE:</b>	/KEVIN J. CARROLL/
<b>DATE SIGNED:</b>	01/03/2020
<b>Total Attachments: 3</b>	
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source=IPGP028_Signed_Assignment-Asfiled010320#page3.tif	

## ASSIGNMENT OF UNITED STATES PATENT APPLICATION

WHEREAS, I/We, Christopher M. Galbraith, Jordan A. Kanko and Paul J.L. Webster made certain new and useful inventions and improvements for which I/We filed, or will be filing, an application for Letters Patent of the United States, identified as U.S. patent application serial number 16/515,892 filed on July 18, 2019, which application is entitled:

### SYSTEMS AND METHODS FOR MONITORING AND/OR CONTROLLING WOBBLE-PROCESSING USING INLINE COHERENT IMAGING (ICI)

AND, WHEREAS, IPG PHOTONICS CORPORATION, a corporation organized and existing under and by virtue of the laws of Delaware, and having an office and place of business at 50 Old Webster Road, Oxford, MA 01540, (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefore;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, I/We have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed under the Patent Cooperation Treaty, in any regional patent office and in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and I/We do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letter Patent for the aforesaid inventions and improvements to the said Assignee as

the Assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, I/We do hereby agree that I/We and my/our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to me/us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be;

AND, furthermore, I/We covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me/us and that full right to convey the same as herein expressed is possessed by me/us.

AND, as a named inventor, I hereby declare that:

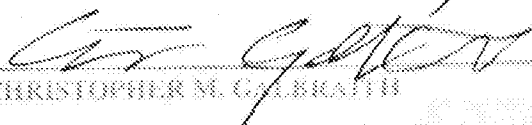
The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understood the contents of the application, including the claims, and I am aware of the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 C.F.R. § 1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

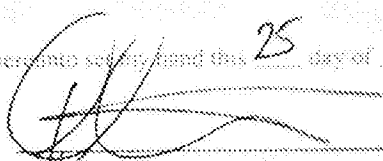
IN TESTIMONY WHEREOF, I have hereunto set my hand this 25 day of July, 2019.

  
CHRISTOPHER M. GALBRAITH

IN TESTIMONY WHEREOF, I have hereunto set my hand this 25 day of July, 2019.

  
JORDAN A. KANKO

IN TESTIMONY WHEREOF, I have hereunto set my hand this 25 day of July, 2019.

  
PAUL J.L. WEBSTER