

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT6022140

|   |  |
|---|--|
| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT                           |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                               |
| <b>CONVEYING PARTY DATA</b>   |  |
| <b>Name</b>   | <b>Execution Date</b>                    |
| JEFFREY D KIERNAN   | 03/17/2020                               |
| <b>RECEIVING PARTY DATA</b>   |  |
| <b>Name:</b>  | MKS INSTRUMENTS, INC.                    |
| <b>Street Address:</b>  | 2 TECH DRIVE, SUITE 201                  |
| <b>City:</b>  | ANDOVER                                  |
| <b>State/Country:</b>   | MASSACHUSETTS                            |
| <b>Postal Code:</b>   | 01810                                    |
| <b>PROPERTY NUMBERS Total: 1</b>  |  |
| <b>Property Type</b>  | <b>Number</b>                            |
| <b>Application Number:</b>  | 16823715                                 |
| <b>CORRESPONDENCE DATA</b>  |  |
| <b>Fax Number:</b>  |  |
| <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>   | 978-645-5515                             |
| <b>Email:</b>   | NewportIP@newport.com                    |
| <b>Correspondent Name:</b>  | MKS INSTRUMENTS, INC. GEORGIA DRISTILLAR |
| <b>Address Line 1:</b>  | 2 TECH DRIVE                             |
| <b>Address Line 2:</b>  | SUITE 201                                |
| <b>Address Line 4:</b>  | ANDOVER, MASSACHUSETTS 01810             |
| <b>ATTORNEY DOCKET NUMBER:</b>  | 0214-800BLD-19UT                         |
| <b>NAME OF SUBMITTER:</b>   | EDWARD SCOTT TRASK                       |
| <b>SIGNATURE:</b>   | /EDWARD SCOTT TRASK/                     |
| <b>DATE SIGNED:</b>   | 03/19/2020                               |
| This document serves as an Oath/Declaration (37 CFR 1.63).  |  |
| <b>Total Attachments: 2</b>   |  |
| source=Combined_DECL-ASSIGN_Jeffrey_D_Kiernan_scan#page1.tif  |  |
| source=Combined_DECL-ASSIGN_Jeffrey_D_Kiernan_scan#page2.tif  |  |

**DECLARATION (37 C.F.R. 1.63) FOR PATENT APPLICATION USING AN  
APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT**

Title of Invention: **Low Profile Heater Apparatus and Method of Manufacture**

As a below named Inventor, I hereby declare that:

This declaration is directed to the attached application, or (if following box is checked) the following application:

United States application number or PCT International application number \_\_\_\_\_, filed on \_\_\_\_\_

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 above-identified application.

I have reviewed and understand the contents of the above-identified application, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

WHEREAS, I have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified application;

WHEREAS, MKS INSTRUMENTS, INC., a corporation of the state of Massachusetts, having a place of business at 2 Tech Drive, Suite 201, Andover, MA 01810 (herein referred to as "Assignee"), desires to acquire, and I desire to grant to assignee, the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I hereby sell, assign and transfer to Assignee, its successors, legal representatives, and assigns, the full and exclusive right, title and interest in and to the Invention, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisionals, continuations, reissues, nonprovisionals and extensions thereof, and all rights of priority resulting from the filing of such patent applications and granting of such patents. In addition, I hereby authorize and request the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to Assignee, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by Assignee, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made. I agree that I will communicate to Assignee, or its successors, legal representatives, and assigns, any facts known to me respecting said Invention, and will testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, nonprovisional and reissue applications, make all rightful oaths, and do everything possible to aid Assignee, its successors, legal representatives, and assigns to obtain and enforce proper patent protection for said Invention in the United States or any foreign country or jurisdiction.

I acknowledge my prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to Assignee and am unaware of any reason why Assignee may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and I have not executed, and will not execute, any document or instrument in conflict herewith.

I also hereby grant Assignee, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of Massachusetts, and any disputes will be resolved in a Massachusetts state court or federal court sited in Massachusetts.

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.

Legal Name of Inventor: Jeffrey D. Kiernan

Signature:  \_\_\_\_\_

Date: 3/17/2020 \_\_\_\_\_