505946698 03/03/2020

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
QI HUA FAN	07/25/2019
THOMAS SCHUELKE	07/31/2019

### **RECEIVING PARTY DATA**

Name:	BOARD OF TRUSTEES OF MICHIGAN STATE UNIVERSITY
Street Address:	450 ADMINISTRATION BUILDING
City:	EAST LANSING
State/Country:	MICHIGAN
Postal Code:	48824

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16642133

### **CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER:	6550-000328-US-NPB
NAME OF SUBMITTER:	MONTE L. FALCOFF
SIGNATURE:	/MONTE L. FALCOFF/
DATE SIGNED:	03/03/2020

### **Total Attachments: 3**

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PATENT 505946698 REEL: 051993 FRAME: 0792

### **ASSIGNMENT**

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor(s), has invented:

#### SINGLE BEAM PLASMA SOURCE

for wh	ich Assi	gnor(s) i	s about to make or has made United States or International application for patent
	(a)		executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration);
	(b)		executed on,; or
	(c)	$\boxtimes$	filed on February 2 6 2 02 0,and assigned Serial No. or PCT International Application No. 16/642,133; and

WHEREAS, BOARD OF TRUSTEES OF MICHIGAN STATE UNIVERSITY, 450 Administration Building, East Lansing, Michigan 48824, hereinafter referred to as Assignee, is desirous of acquiring all right, title, and interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, Assignor(s) hereby confirms any prior assignment to Assignee, and to the extent that Assignor(s) has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;

Assignor(s) hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor(s) hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

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### **ASSIGNMENT**

Assignor(s) hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

Assignor(s) hereby acknowledges his/her assignment obligations pursuant to MSU Patent Policy as set forth in the MSU Faculty Handbook, and acknowledges and agrees that the subject matter of this application constitutes a University Invention, as that term is defined in the MSU Faculty Handbook.

The undersigned hereby grant(s) the law firm of Harness, Dickey & Pierce, P.L.C. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

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x dr	
Qi Hua FAN	Witness
7/25/2019	
Dated:	Witness
Thomas SCHUELKE	Witness
Dated:	Witness

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Qi Hua FAN	Witness
Dated:	Witness
Thomas SCHUELKE	Witness

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