505371141 03/12/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5417933

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ROBERT J. BURKE	03/11/2019
ALEXANDER THOMAS BURKE	03/12/2019

RECEIVING PARTY DATA

Name:	ARCATA SYSTEMS	
Street Address:	114 LIMESTONE LANE	
City:	SANTA CRUZ	
State/Country:	CALIFORNIA	
Postal Code:	95060	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15081768

CORRESPONDENCE DATA

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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ATTORNEY DOCKET NUMBER:	110512-8001.US03
NAME OF SUBMITTER:	CRYSTAL FONG
SIGNATURE:	/Crystal Fong/
DATE SIGNED:	03/12/2019

Total Attachments: 4

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> PATENT REEL: 048577 FRAME: 0797

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ATTORNEY DOCKET NUMBER: 110512-8001.US03

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

Title of Invention: SINGLE-PASS, HEAVY ION SYSTEMS FOR LARGE-SCALE NEUTRON SOURCE APPLICATIONS

As a below named inventor, I hereby declare that:

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

[X] United States application or PCT international application number <u>15/081,768</u> filed on March 25, 2016.

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.

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 C.F.R. Section 1.56.

Whereas, the undersigned inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the Attorney Docket Number provided above in the header of this document;

Whereas, **Arcata Systems**, a sole proprietorship, having its principal place of business at <u>114 Limestone Lane</u>, <u>Santa Cruz</u>, <u>CA</u>, <u>95060</u>, desires to acquire and each undersigned inventor desires to grant to **Arcata Systems**, 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 one dollar (\$1.00) and good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor, hereinafter referred to as ASSIGNOR, hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to Arcata Systems, hereinafter referred to as ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, 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 divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests 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 the 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 the 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; and each undersigned inventor agrees to execute, without charge to said Assignee but at the Assignee's expense, any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in Assignee, its successors, legal representatives, and assigns, whenever requested by the Assignee, its successors, legal representatives, or assigns.

> PATENT REEL: 048577 FRAME: 0798

ATTORNEY DOCKET NUMBER: 110512-8001.US03

ASSIGNOR(S) grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to the Assignee and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute; any document or instrument in conflict herewith. Each undersigned inventor also hereby grants the assignee, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

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.

1) Legal Name of Inversor: Robert J. Burke Signature:	Jurko Date: 20197	Pard 1,
2) Legal Name of Inventor: Alexander Thomas E	3urke	(
Signature	Date:	

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> PATENT **REEL: 048577 FRAME: 0800**

ATTORNEY DOCKET NUMBER: 110512-8001.US03

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1) Legal Name of Inventor: Robert J. Burke	
Signature:	Date:
2) Legal Name of Inventor: Alexander Thomas Burke	
Signature:	Date: 3/12/19

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PATENT REEL: 048577 FRAME: 0801