505317390 02/07/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE

CONVEYING PARTY DATA

Name	Execution Date
LAWRENCE LIVERMORE NATIONAL SECURITY, LLC	02/01/2019

RECEIVING PARTY DATA

Name:	U.S. DEPARTMENT OF ENERGY
Street Address:	1000 INDEPENDENCE AVE., SW
City:	WASHINGTON
State/Country:	D.C.
Postal Code:	20585

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16058953

CORRESPONDENCE DATA

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NAME OF SUBMITTER:	BRENDA K. BANKS
SIGNATURE:	/BRENDA K. BANKS/
DATE SIGNED:	02/07/2019

Total Attachments: 1

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PATENT 505317390 REEL: 048262 FRAME: 0526

CONFIRMATORY LICENSE

Title: INTEGRATED SOLID STATE RAPID THERMO-CYCLING SYSTEM

Inventor(s): N. Reginald Beer, Gary W. Johnson

DOE Docket No.: S132,789

Docket No./Sub: IL-12840/A

Contract Number: DE-AC52-07NA27344

U.S. Patent Application S.N.: 16/058953

Contractor: Lawrence Livermore National Security, LLC Filing Date: 08/08/18

Lawrence Livermore National Laboratory

Waiver No.: W(C) 08-001

Foreign patent applications filed or intended to be filed at contractor's expense in (countries):

WHEREAS, the above-identified invention is a subject invention under the above-identified contract;

WHEREAS, the above-identified Class Waiver of Government rights in certain identified inventions and the aboveidentified contract provides the Contractor with the right to elect to retain title in certain subject inventions and the Contractor has elected to retain title in the above-identified subject invention, EXCEPT FOR a paid-up license under the above-identified contract and the above-identified waiver.

ACCORDINGLY, the Contractor hereby confirms that under the provisions of the above-identified contract governing patent rights, it has granted to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world. This license applies to the above-identified invention, the above-identified patent application(s), and any and all divisions or continuations thereof and any resulting patent or reissue patent which may be granted thereon.

The Government reserves for itself, and is hereby granted by the Contractor, the irrevocable power to inspect and make copies of the file wrapper(s) of the above-identified U.S. patent application and of any related or continuation patent application(s), whether domestic or foreign, for the above-identified invention.

It is understood and agreed that this instrument does not preclude the Government from asserting rights under the provisions of the above-identified contract or any other agreement between the Government and the Contractor, or any other rights of the Government with respect to the above-identified invention.

Signed on behalf of:

LAWRENCE LIVERMORE NATIONAL SECURITY, LLC

(Sontractor)

Mark H. Lough, Debuty General Counsel Lawrence Livermore National Laboratory

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PATENT REEL: 048262 FRAME: 0527

RECORDED: 02/07/2019