

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
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EPAS ID: PAT7650631

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	CONFIRMATORY LICENSE (SEE DOCUMENT FOR DETAILS)
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
LAWRENCE LIVERMORE NATIONAL SECURITY, LLC	07/31/2020
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	U.S. DEPARTMENT OF ENERGY
<b>Street Address:</b>	1000 INDEPENDENCE AVE. SW
<b>City:</b>	WASHINGTON
<b>State/Country:</b>	D.C.
<b>Postal Code:</b>	20585
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	17981412
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	IL-13519C1O1
<b>NAME OF SUBMITTER:</b>	SANDIA HARGES
<b>SIGNATURE:</b>	/SANDIA HARGES/
<b>DATE SIGNED:</b>	11/17/2022
<b>Total Attachments: 1</b>	
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**Confirmatory License**

**LOCALIZATION BASED ON TIME-REVERSED EVENT SOUNDS**

**Christopher Candy, Jim Candy and Karl Fisher**

**DOE Docket No.: S165467**

**Contract Number: DE-AC52-07NA27344**

**Contractor: Lawrence Livermore National Security, LLC**

**Lawrence Livermore National Laboratory**

**Docket No./Sub: 13519/A**

**U.S. Patent Application S.N.: 16/943250**

**Filing Date: July 30, 2020**

**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 above-identified 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 (Contractor)**

**Witness:**

Jacqueline Marie Thomason  
Digitally signed by  
Jacqueline Marie Thomason  
Date: 2020.07.31 15:57:19  
-0700'

**Jacqueline Thomason  
Patent Assistant**

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