

<b>PATENT ASSIGNMENT COVER SHEET</b>
--------------------------------------

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5946533

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
COLORADO STATE UNIVERSITY	01/03/2020
<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>
<b>Application Number:</b>	15234824
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)586-7127
<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>	2025862802
<b>Email:</b>	brenda.banks@hq.doe.gov
<b>Correspondent Name:</b>	BRENDA K. BANKS
<b>Address Line 1:</b>	1000 INDEPENDENCE AVE.
<b>Address Line 4:</b>	WASHINGTON, D.C. 20585
<b>NAME OF SUBMITTER:</b>	BRENDA K. BANKS
<b>SIGNATURE:</b>	/BRENDA K. BANKS/
<b>DATE SIGNED:</b>	02/05/2020
<b>Total Attachments: 1</b>	
source=Confirmatory License#page1.tif	

# License to the United States Government

Sign and submit the executed document to the appropriate funding agency (e.g. upload in iEdison).

Invention Title: Ultra Efficient Turbo-Compression Cooling

Inventor(s): Todd M. Bandhauer, Torben P. Grumstrup

U.S. Filing/Issue Date: 08/11/2016

Patent or Application Serial No.: 15/234,824

Grant/Contract Number(s): DE-AR0000574

Foreign Applications filed/intended in (countries): \_\_\_\_\_

The invention identified above is a Subject Invention under **35 U.S.C. 200, et seq.**, and the Standard Patent Rights clause at **37 CFR 401.14, FAR 52.227-11** or **FAR 52.227-12** (if applicable) which are included among the terms of the above identified grant or contract award from the United States Government. This document is confirmatory of:

1. The nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the invention described in any patent application and in any and all divisions, continuations, and continuations in part, and in any and all patents and re-issues granted thereon throughout the world; and
2. All other rights acquired by the Government by reason of the above identified grant/contract award and the laws and regulations that are applicable to the award.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

Signed this 3rd day of January, 2020.

By Cindy L. Pederson  
(Institutional Business Official)

Cindy L. Pederson  
(Signature)

Title Patent Manager, Colorado State University Research Foundation

For COLORADO STATE UNIVERSITY  
(Grantee/Contractor Organization)

At PO Box 483 Fort Collins, CO 80522  
(Business Address)