

STATEMENT OF CONSIDERATIONS

ADVANCE CLASS WAIVER OF PATENT RIGHTS FOR TECHNOLOGY DEVELOPED UNDER SUBCONTRACTS ISSUED BY THE CALORICOOOL CONSORTIUM; W(C)-2017-003; CH-1783

The Department of Energy's (DOE) Office of Energy Efficiency & Renewable Energy (EERE) is funding several consortiums as part of the Energy Materials Network (ENM) comprised of large, multidisciplinary teams of world class investigators focused on critical national energy needs that will shorten the path from laboratory innovation to technological development and help ensure continued American competitiveness, economic growth and energy security. One of DOE's Energy Materials Network (EMN), Caloricool is focused on more environmentally friendly and energy-efficient refrigeration technologies.

Led by the Ames Laboratory, the CaloriCool team includes partners from two other national laboratories – Oak Ridge National Laboratory, Pacific Northwest National Laboratory and several universities – Pennsylvania State University and the University of Maryland. Industry partners include Citrine Informatics and Astronautics Corporation of America. Headquartered at Ames, CaloriCool brings together many of the world's leading materials researchers around a common objective to design and discover high-performance, caloric energy-conversion materials that can be economically adopted by industry for a new generation of energy efficient solid-state cooling/heat-pumping devices and systems, enabling a broad spectrum of applications ranging from residential and commercial air conditioning, refrigeration and freezing, to gas separation and liquefaction.

CaloriCool is funded by DOE's Office of Energy Efficiency & Renewable Energy. DOE national laboratories will receive funds from DOE via Field Work Authorizations or Inter-entity Work Orders and will be able to elect title to inventions they develop through the terms of their Management and Operating (M&O) contracts, as authorized by P.L. 96-517, as amended, (the Bayh-Dole Act) as codified in 35 U.S.C. § 200-212, or the applicable DOE Class Patent Waiver covering the inventions developed at the facility.

All other CaloriCool participants will be funded through Laboratory subcontracts. University, non-profit, and domestic small business subcontractors (Bayh-Dole subcontractors) will be able to elect title to inventions they developed through the terms of their subcontract, consistent with the Bayh-Dole Act. In contrast, inventions developed by non-Bayh-Dole subcontractors (e.g., large businesses) vest with the Government under the broad title vesting authorities of the Atomic Energy Act of 1954, as amended, (42 U.S.C. § 2182), and Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. § 5908) unless waived by DOE.

Accordingly, DOE hereby waives the Government's title to subject inventions made by employees of all past, current, and future CaloriCool large-business subcontractors (or other non-Bayh-Dole subcontractors), regardless of tier to enable the participants to expediently commercialize the various technologies in accordance with CaloriCool IP Management Plan. While it is anticipated that all subawards to University, non-profits and for-profit entities will be issued as subcontracts by Ames under its M&O Contract as the

CaloriCool lead, it is recognized that there may be the need for other National Laboratory participants to issue subcontracts from time to time. Therefore, this class waiver covers all CaloriCool subcontracts issued by National Lab Participants to large-business (or other non-Bayh-Dole) entities.

This class patent waiver is available to any domestic large business that is a recipient, or subrecipient at any tier, to a funding agreement issued under the CaloriCool consortium and is providing at least 20% cost share of their portion of the project. A domestic large business, as used in this class patent waiver, is any for-profit entity that does not qualify as a "small business" under Bayh-Dole and is incorporated (or otherwise formed) under the laws of a particular State or territory of the United States. This waiver is contingent upon maintaining at least 20% cost share of their portion of the project in aggregate over the course of their project.

This class waiver of the Government's rights in inventions is subject to the attached terms and conditions (see Attachment A) including the usual Government license, march-in rights, and preference for U.S. industry provisions as set out in 35 U.S.C. 202-204. The attached terms also include a U.S. Competitiveness clause, paragraph (t), which requires that products embodying any waived invention or produced through the use of any waived invention be manufactured substantially in the United States unless the participant demonstrates to the satisfaction of DOE Field Patent Counsel, with the written concurrence of the cognizant DOE Program, that it is not programmatically or commercially feasible to do so. Furthermore, subcontractors do not retain any rights to an invention in the event that the above U.S. Competitiveness clause or the utilization reporting requirement is breached. Subcontractors further agree to make the above condition binding on any entity acquiring rights to any waived invention, including subsequent assignees or licensees. Should subcontractors or other entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by DOE.

The grant of this class waiver is not expected to have any adverse effects on competition or market concentration. Rather, the waiver should enhance competition and growth of domestic supplies of critical materials and related industries. In any event, if a participant who has obtained title to an invention arising under the project is not making reasonable efforts to utilize a waived invention, DOE can exercise march-in rights.

Except as otherwise specifically approved by DOE Patent Counsel, acceptance of a CaloriCool subcontract by a non-Bayh-Dole subcontractor shall constitute notice to DOE of the subcontractor's acceptance of the terms and conditions of this class waiver.

Considering the foregoing, and in view of the statutory objectives to be obtained and the factors to be considered under DOE's statutory waiver policy, all of which have been considered, it has been determined that this class waiver as set forth above will best serve the interests of the United States and the general public. It is recommended that the waiver be granted.

[REDACTED]
Michael J. Dobbs
Acting Deputy Chief Counsel
Intellectual Property Law Division
DOE Chicago Office

Date: May 1, 2017

Based upon the foregoing Statement of Considerations, it is determined that the interests of the United States and the general public will best be served by a waiver of the United States and foreign patent rights as set forth herein, and, therefore, the waiver is granted. This waiver shall not affect any waiver previously granted.

CONCURRENCE:

[REDACTED]
Antonio M. Bouza
Technology Manager
Advanced Manufacturing Office
EE-5B

Date: 5/08/2017

APPROVAL:

[REDACTED]
Brian J. Lally
Assistant General Counsel for Technology
Transfer and Intellectual Property
GC-62

Date: 5/12/17