Statement of Considerations

CLASS WAIVER OF THE U.S. GOVERNMENT'S U.S. AND FOREIGN PATENT RIGHTS IN INVENTIONS MADE AND TO BE MADE BY SUCCESSFUL AWARDEES, AND SUBAWARDEES AND TEAM MEMBERS, IN THE COURSE OF WORK UNDER AWARDS PURSUANT TO FUNDING OPPORTUNITY ANNOUNCEMENT DE-FOA-0000506, FOR A U.S.-INDIA JOINT CLEAN ENERGY RESEARCH AND DEVELOPMENT CENTER (CENTER).

W(C) 2012-005

On May 16, 2011, the U.S. Department of Energy (DOE) issued a Funding Opportunity Announcement (FOA) intended to develop a U.S.-India Joint Clean Energy Research and Development Center (Center). This Center would facilitate joint research and development on clean energy by teams of scientists and engineers from the U.S. and India and related joint activities, needed to deploy clean energy technologies rapidly with the greatest impact. Priority topics to be addressed through the Center are:

1. Building energy efficiency of buildings
2. Second generation biofuels
3. Solar energy

These are areas in which the U.S. and India have a shared interest in further developing technologies to help our countries meet clean energy and climate change goals. They are also areas in which the U.S. and India have complementary strengths and could benefit from internationally collaborative research. To operationalize the Center within the U.S., the DOE has made an award in each of these three issue areas.

Awards have been made to awardees with the knowledge and experience to undertake first-rate collaborative research programs, and will involve subawardees and other team members. These require new "bricks and mortar" facilities. To keep the focus on research and international collaboration, management administrative expenses will be kept to a minimum. These awardees and teams will help bring together top talent from both countries and are expected to generate key technological advancement through genuine collaboration between U.S. and Indian researchers.

The R&D focus under this FOA are as follows:

BUILDING ENERGY EFFICIENCY: The objective is to contribute to dramatic improvements in the energy efficiency of buildings (commercial or residential) in the U.S. and India. Recommended topics include: building heating and cooling, cool roofs, advanced lighting, advanced shells,

daylighting designs, energy-efficient building materials, software for building design and operations, sensor renewable energy technologies such as building-integrated photovoltaics (BIPV), wind energy, ground source heat pumps, and biomass, could also be explored.

SECOND-GENERATION BIOFUELS: The objective is to contribute to the improvement or development of advanced biofuels technologies that support downstream commercial deployment through enhanced process efficiency, cost-effectiveness, and environmental sustainability. Applied research topics of interest include one or more of the following: (1) conversion technologies for advanced biofuels, including biochemical, pyrolysis, gasification, or hybrid routes to conversion; (2) identification and achievement of optimal characteristics for lingo-cellulosic feedstocks through an interface between conversion systems and feedstocks, and feedstock improvements via multiple pretreatment processes; (3) one or more of the following algae biofuel areas: algae cultivation and harvesting system, extraction, and conversion technology development, and (4) standards and certification for different biofuels and co-product and endues applications.

SOLAR ENERGY: The objective is to contribute to dramatic improvements in solar energy technology, establishing the scientific basis needed to underpin the efficient capture, conversion, storage and utilization of solar energy for electricity generation in a cost-effective manner. Of high priority are new concepts and architectures in solar electricity production, including organic hybrid organic/inorganic conversion systems, innovative nanoscale designs of interfaces and cells, and novel materials, as well as advanced theory, modeling and simulation of such systems.

Section 152 of the Atomic Energy Act of 1954, (42 U.S.C. 2182), and section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974, (42 U.S.C. 5908) provide that the Government obtains title to any invention made under a DOE award that is not subject to the Bayh-Dole Act (35 U.S.C. 200-212), (Pub.L. 96-517, as amended), unless title is waived by DOE in accordance with these Acts, and implementing regulations at 10 C.F.R. 784. It is the purpose of this advance class waiver to waive, to the applicable awardees, subawardees, team members or participants in other relevant subagreements in the Center, title to the inventions made by the respective awardees'/subawardees'/team members'/subagreement participants' employees, in a fashion enabling such awardees/subawardees/team members/participants, to seek to expeditiously commercialize the various technologies. Inventions "made", in this context shall mean inventions conceived or first actually reduced to practice under any contract, subcontract, or other arrangement which includes research, development or demonstration work. Accordingly, DOE will waive the Government's title to subject inventions to the applicable awardees/subawardees/team members/participants agreeing to the terms of this

waiver. This class waiver does not apply to inventions made by the Bayh-Dole participants pursuant to Pub.L. 96-517, as amended, or National Laboratories who already have the right to elect title.

This advance class waiver of the Government's rights in inventions is subject to the usual Government license, march-in rights, and preference for U.S. industry provisions set out in 35 U.S.C. 202-204. This class waiver also includes the attached U.S. Competitiveness clause, paragraph (t), which requires that, for use or sale in the U.S.A., products embodying any waived invention or produced through the use of any waived invention, be manufactured substantially in the United States, unless the relevant participant demonstrates to the satisfaction of DOE Patent Counsel, with the concurrence of the Cognizant DOE Program, that it is not programmatically or commercially feasible to do so. The participants further agree to make the above condition binding on any entity acquiring rights to any waived invention, including subsequent assignees or licensees. Should the participants 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.

Since awards under this FOA require 50% cost-sharing in the aggregate, e.g., among awardees, subawardees and other team members, and since this substantial cost-share will be provided by these various team members, there is ample consideration for this class waiver. Normally, DOE requires 20% cost-share for a contractor or awardee to qualify for an advance patent waiver.

The grant of this advance class waiver is not expected to have any adverse effects on competition or market concentration. Rather, the waiver should enhance U.S. economic and energy security through the development of new energy technologies that will compete with existing technologies and other new emerging technologies. In any event, if a participant who is subject to this waiver 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.

For those who may choose not to accept some of the terms of this class waiver, they may still request an advance waiver of all or any part of the rights of the United States in inventions conceived or first actually reduced to practice in performance of their agreement. Even if such advance waiver is not requested or the request is denied, the recipient or team member will have a continuing right under the award to request a waiver of the rights of the United States in the title to identified inventions, i.e., individual inventions conceived or first actually reduced to practice in performance of the award.

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 advance 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.

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Linda P. Field
Patent Counsel

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]

Phyllis G. Yoshida, PI-30
Deputy Assistant Secretary
for Asia, Europe and the Americas

Date: 11/14/2012

APPROVED:

[redacted]

John T. Lucas, GC-62
Assistant General Counsel for Technology
Transfer and Intellectual Property

Date: 11/16/2012

(t) U.S. COMPETITIVENESS

The participant agrees that, for use or sale in the U.S.A., any products embodying any waived invention or produced through the use of any waived invention, will be manufactured substantially in the United States, unless the participant can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The participant agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the participant or other such entity receiving rights in the 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 the DOE.