

STATEMENT OF CONSIDERATIONS

ADVANCE CLASS WAIVER OF PATENT RIGHTS FOR TECHNOLOGY DEVELOPED UNDER DOE'S ENERGY INTENSIVE PROCESSES PROGRAM; SOLICITATION NO.DE-PS36-08GO98014; W(C)-2009-001

The Department of Energy (DOE) is providing federal assistance under its Energy Intensive Processes Program (EIP Program) for research and development necessary to develop innovative technologies that, when deployed commercially, would reduce the energy requirements for energy-intensive processes across many industrial sectors. This advance class waiver is in direct support of the EAct 2005 Section 106 goal of voluntary reduction of energy intensity of U.S. manufacturing industries by 25% over the next 10 years and the concomitant reduction of carbon foot print of the U.S. industries, and is intended to apply to inventions of all current and future awardees and subawardees participating in the EIP Program, regardless of tier, except participants eligible to obtain title pursuant to P.L. 96-517, as amended, and National Laboratories.

Under the EIP Program, DOE expects to make about 6-12 separate awards in five areas of criteria including: (1) Market and Technical Objectives, (2) Potential Energy, Carbon Emissions Reduction, Economic, and Environmental Benefits, (3) Commercialization Plan and Industry Involvement, (4) Technical Approach and Project Management Plan, and (5) Qualifications and Resources. Because the number of awards is relatively large, and because the intellectual property disposition for all awardees will be treated similarly, it is expedient for a class waiver to be issued that will cover all awardees, rather than to issue patent waivers for each individual awardee.

Teaming arrangements among the participants under each award are anticipated and have been encouraged. Each team will be composed of a prime awardee and one or more subawardees. It is anticipated that each of the teams will develop an appropriate allocation of patent rights among the participants to facilitate the commercial development of inventions made under the EIP Program.

It is the purpose of this advance class waiver to waive to the participants title to the inventions made by the respective participants' employees in a fashion enabling the participants to expediently commercialize the various technologies. Accordingly, DOE will waive the Government's title to subject inventions, other than inventions made by the Bayh-Dole participants pursuant to P.L. 96-517, as amended, or National Laboratories, to the participants agreeing to the terms of this waiver.

This advance class waiver shall apply to each of the participants under the teaming arrangements upon the Contracting Officer's written notice to Field Patent Counsel that the participant is obligated to provide at least 20 percent cost sharing, and shall remain in effect for so long as such cost sharing is maintained, in aggregate, over the term of the Project.

The Oak Ridge National Laboratory (ORNL) is a prime awardee under the EIP Program entitled "Flexible Hybrid Friction Stir Joining Technology", DOE Proposal No. 2408-T496-08 (the Project). ORNL's role is to serve as the project's administrator, and will lead the overall technology development, focusing on thick-section joining development and hybrid process development, microstructural characterization, and theoretical analysis of the materials behavior and process simulation. The proposed total funding level from DOE to ORNL for the Project is \$1,950,000 for three years. DOE program officers have indicated that full funding is expected.

ORNL's industrial participants on the Project are ExxonMobil Corporation (ExxonMobile), providing a cost share of \$700,000, and no DOE funding; Edison Welding Institute (Edison) which is providing a cost share of \$100,000 with DOE funding \$350,000; ESAB Group, Inc. (ESAB) which is providing a cost share of \$120,000 and DOE funding \$500,000; and MegaStir Technologies (MegaStir) providing a cost share of \$50,000 DOE funding \$100,000. MegaStir will be a subcontractor to ESAB.

As noted above, ORNL is the prime awardee for the Project. It has extensive experience in managing large scale, multidisciplinary research and development projects with collaboration from universities and industry participants. The project team has the collective technology portfolio which covers every critical aspect of the proposed work, as well as application specific knowledge for the proposed work.

As project administrator, ORNL will lead the overall technology development, which focuses on thick-section joining development and hybrid process development, micro-structural characterization, and theoretical analysis of the materials behavior and process simulation.

ESAB's primary role on the Project is equipment builder. ESAB will lead the field-deployable Friction Stir Weld (FSW) system prototyping (design and build the prototype FSW system based on the research findings and data from other team participants); coordinate business case development and commercialization plan in FSW equipment; and, they will provide current FSW system for the team to evaluate.

MegaStir's primary role is tool material and equipment builder. MegaStir will lead the polycrystalline boron nitride (PCBN) based tool material development and testing; assist ESAB in system hardware design and prototyping; and, participate in process development, business case analysis and technology commercialization.

ExxonMobil's role is to (1) provide guidance for research program planning, execution, and results; (2) provide guidance concerning the use of friction stir welding to fabricate large diameter, thicker wall pipeline steels; (3) provide assistance in obtaining code and regulator acceptance of friction stir welding for pipeline construction; (4) conduct materials testing and evaluation of welds; (5) provide numerical modeling analysis of welds (fluid flow, thermal cycles), including characterization of the effect of heat assistance; (6) provide assistance and/or donation in pipe procurement; (7) provide background IP; and (8) lead the technology commercialization effort in oil-gas industry.

EWI's primary role is research and development, and will evaluate alternative tool material and tooling development; process the development for thick-section pipes and the hybrid approach with induction heating; participate in FSW prototype system design; and, develop the broad technology transfer and commercialization strategy to reach various industries by utilizing its extensive membership mechanisms.


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 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 concurrence of the cognizant DOE Program, that it is not programmatically or commercially feasible to do so. Field Patent Counsel, for good cause shown in writing, may grant a deviation from this U.S. Competitiveness clause in advance of contracting. 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.

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 competition and growth of the energy-intensive processes to America's industries while contributing to the effective modernization of the country's energy-intensive processes. 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.

In addition to the above, all participants under the EIP Program, other than participants which are domestic small businesses or non-profit organizations under P.L. 96-517, as amended, or National Laboratories, shall give DOE written notice of their acceptance of the terms and conditions of this advance class waiver prior to entering into any agreement incorporating the terms of this waiver under the EIP Program. Except as otherwise specifically approved by DOE Patent Counsel, a participant's acceptance of an agreement under the EIP Program, at any tier, shall constitute that participant's notice to DOE of its acceptance of the terms and conditions of this class waiver.

In the event a participant does not participate in subsequent phases of the EIP Program, the remaining participants in that participant's team shall retain, as a minimum, a royalty-free, nonexclusive license throughout the world, with the right to grant sublicenses, in each subject invention held by such participant pursuant to this advance class waiver, except as otherwise approved by DOE Field Patent Counsel.


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 interest of the United States and the general public. It is recommended that the waiver be granted.


Jana Cook Moody
Patent Counsel
Golden Field Office

Date: _____

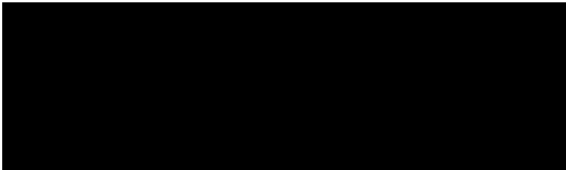
Based upon the foregoing Statement of Considerations, it is determined that the interests of the United States and the general public will best be served by a waiver of the United States and foreign patent rights as set forth herein, and, therefore, the waiver is granted. This waiver shall not affect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

CONCURRENCE:


Douglas Kaempf, Program Manager
Industrial Technology Program
EE-2F

Date: 6/27/2009

APPROVED:


Paul A. Gottlieb
Assistant General Counsel for
Technology Transfer and
Intellectual Property

Date: 6/30/09

(t) U.S. COMPETITIVENESS

The Contractor agrees that 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 Contractor 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 Contractor 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 Contractor 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.